McGill University Libraries
3 100 765 043 A

SER
ORAGE
IN DOM INO CON FI DO
V. 24-25 1963-64
102742
ACCESSION NUMBER
DATE Sept. 1969
MACDONALD COLLEGE LIBRARY

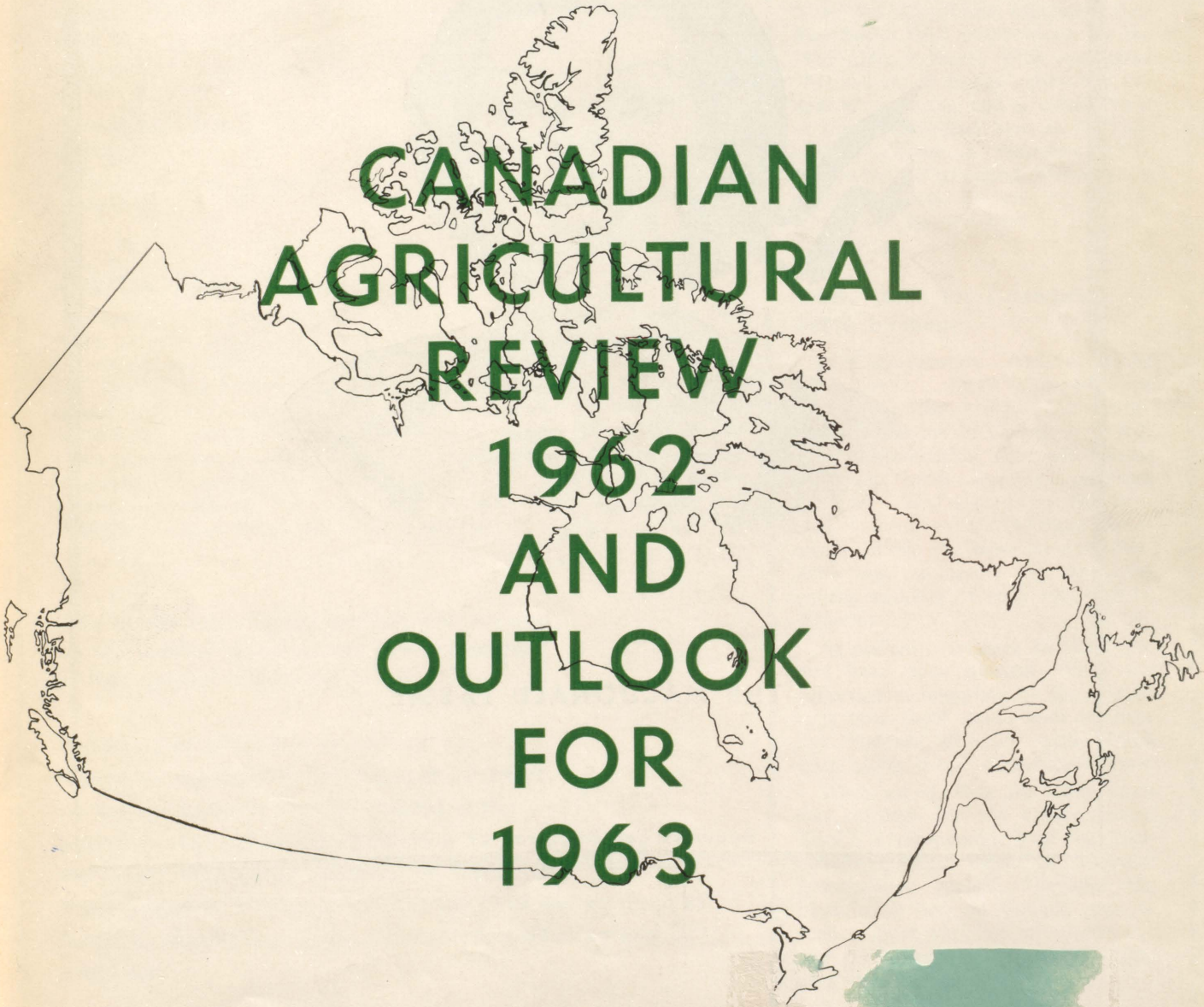
JAN 8 6 1963

The Macdonald FARM Journal

MASTERY FOR SERVICE

102742

JANUARY 1963



CANADIAN AGRICULTURAL REVIEW 1962 AND OUTLOOK FOR 1963

MACDONALD

THE MACDONALD LASSIE

MARKET OUTLOOK ECONOMIC INDICATORS

Indicator	1949	1961	1962
Index of Industrial Production, Canada, October	100	173	189
Disposable Income, Canada, Jan. - Sept., Billions	10	19	21
Consumer Price Index, Food, Montreal, November	100	132	132
Cash Farm Income, Quebec, Jan. - June, Millions	157	200	201
Net Farm Income, Quebec, Annual, Millions	204	195	——
Farm Prices, Quebec, October	100	105	106
Cost of Goods and Services used by Farmers, Eastern Canada, August	100	141	145
Farm Price of Milk for Ice Cream and Concentration, Quebec, October, Dollars per Cwt.	$ 2.67	$ 2.73	$ 2.80
Price Canada B Hogs, Montreal, January 4	$28.68	$29.00	$28.00
Price Good Steers, Montreal, January 4	$20.45	$23.50	$25.35

AGRICULTURAL RESEARCH

Let us not "perpetuate the hoary and patently false doctrine that, when all else fails, science, agricultural research, and agricultural extension can be counted on to yield improvement in the farmer's material lot. One of the elementary axioms of economics is that cost reductions cannot benefit producers in a competitive industry but are passed on immediately and inevitably to consumers in reduced prices. Funds allocated to agricultural research yield big social dividends but are powerless to create agricultural profits or prosperity." (V.C. Fowke). Why support agricultural research? To realize the big social dividend. Also to keep agriculture competitive with other countries.

This month our regular outlook and reviews on the market situation has been expanded in this special "Economic Issue".

Beginning on page 6 is an outlook for Canadian Agriculture for the next 10 years, an 8 page pull-out section stapled in the centre of the magazine (that may be removed and retained for future reference) contains the Canadian Farm Situation 1962 and Outlook for 1963 and on page 21 David L. MacFarlane talks about farm marketing and its problems.

Protein anyone ?

Someday, milk will be sold on the basis of protein content rather than on the basis of butterfat. When that day arrives, some of the research behind the move toward protein testing will have taken place at Macdonald College.

Dr. Herb MacRae and Prof. John Moxley of the Department of Animal Science are currently working on a fast, reliable method for testing the amount of protein or solids-not-fat in milk. In addition, research is being conducted on the College dairy herd to develop a breeding program based on the production of solids-not-fat rather than on the present ROP tests for butterfat and total milk production.

COLLEGE ROYAL

No sooner had students returned from the Christmas holidays, than they began final preparations for the 1963 College Royal. With the theme "Macdonald in Focus", they will endeavour to bring you a candid look at student activities here at the College. The date is **February 22nd.** You're invited to attend. More details of the program for the '63 College Royal will be presented in the February issue.

White birch for Canada's 100th birthday

A Confederation Trail of white birch trees ... that's what we hope to have in the Morgan Arboretum here at Macdonald College by 1967. This Confederation Trail will consist of white birch seedlings collected from all across Canada by Dr. Brittain, Curator of the Morgan Arboretum. While the external characteristics may be nearly the same, the genetic makeup of each tree will be different.

At present over three hundred species have been planted. When the collection is complete by the end of next year there could well be over five hundred different white birch trees along the Confederation Trail.

When asked, Why the white birch was selected for the Confederation Trail ?, a representative of the Macdonald College Dept. of Woodlot Management replied, "Because the birch trees here in Canada give us such a great variation in species ... and furthermore what's more Canadian than a white birch tree."

INSIDE . . .

Community Pastures Next in Quebec . . .

New words, new phrases, new terms — it seems as though each day we meet up with one of these in this business of farming. New words such as "tranquilizers", new phrases such as "weed free environments", and new terms such as "ARDA". Today, as never before, it takes a specialist to keep pace with the changes in Canadian Agriculture.

One new term that we, here in Quebec, are going to hear more and more each day is "community pastures". Up until this year, the use of this term was confined to the Prairies and the Maritimes. If, however, discussions in Quebec City are any indication, then community pastures are going to play a major role in Quebec agriculture in the next few years.

One aspect of the Federal government's ARDA program is to make more rational use of all rural human and natural resources. We have lots of both here in Quebec, with the largest farm population of any province and the largest amount of improved farm land. Yet the number of farms with potential production of under $1,200. is 28% — more than one quarter of the farms in the province.

But what can be done wtih these marginal farms, many of which are abandoned or will be in the near future? The quickest solution would be for the government to buy these small farms and then either organize them into community pastures or sell them to agricultural cooperatives who in turn would operate them as community pastures.

This community pasture idea will meet a lot of resistance from highly individualistic Quebec farmers. They like to run their own farms, no matter how small their acreage. This community pasture plan would allow some of these farmers to remain on these small farms, having as an added source of income the money derived from beef cattle raised on the community pastures. In addition, those acres normally devoted to pasture on the farm, could either be allowed to return to forest or else improved to provide forage for winter use.

At the present time governments are spending considerable money for grants, loans, technical assistance, and subsidies, — money which is being wasted on small farms which were poor to start with and which should never have been encouraged to continue production. With the community pasture idea, then some of this money could be spent in making the best use of some of our human and natural resources. This is one of the most important aspects of ARDA.

Farm Chemicals Again . . .

Considerable reaction resulted from an editorial in last month's Journal about the use of farm chemicals. We were pointing our finger at author Rachael Carson who has written a book entitled The Silent Spring. Judging from the response, several have read the book and many agree with statements in the last issue.

One reader pointed out the safety in using chemicals for the control of weeds. He told us about a practical joke played on a workman who was spraying with a herbicide. The incident occurred during the spraying of Sherbrooke's CHLT-TV right-of-way on Mount Orford. Tempted by the coffee colour of the chemical, Du Pont's Ammate X, a thoughtless prankster used it to fill the Thermous bottle of a fellow worker, who later inadvertently drank some. The man was taken to hospital but he suffered no serious effects. He was back to work a few hours later.

This is only one report. Fortunately, not everyone is so lucky. As we said before, its the misuse of farm chemicals that hurts, not the use.

Inside . . .

At this time of the year, anyone who has anything to do with agriculture has his ideas about what may happen in 1963. We have our ideas too. They're published in a convenient magazine supplement in the centre of this issue. Professors D. L. MacFarlane and C. B. Haver of the Department of Agricultural Economics are responsible for this research and the writing of this special review and outlook statement. We hope this forecast will assist you in making plans for 1963. If you would like additional copies of the review and outlook statement, order them from Box 237, Macdonald College, P.Q.

Elsewhere in this issue you will find a special article on marketing of farm products by Prof. D. L. MacFarlane. He explains the various methods of marketing, outlining some of the advantages of each. In another article, "The Next Ten Years in Canadian Agriculture", Prof. MacFarlane takes an economist's look at what the agricultural situation in Canada will be in 1972. We know that you'll find these articles the basis for some good discussions.

MARK WALDRON

Editor
MARK WALDRON B.Sc. (Agr.)
Macdonald College

Managing Editor
BILL BAILEY

Publisher
RONALD J. COOKE

Circulation Manager
J. M. BOUDRIAS

Advertising Production
DOROTHY M. BARKER

Advertising

Montreal —
451 Beaconsfield Blvd.,
Beaconsfield, P.Q.
Area Code 514
OX. 5-5712

Toronto —
GEORGE COOKE
145 Yonge St.,
Area Code 416
EM. 4-8546

Vancouver —
J. L. JACKSON
3610 Main St.,
Area Code 604
TR. 6-6541

The Macdonald Farm Journal is published by Rod & Gun Publishing Company, also publishers of **Rod & Gun, Au Grand Air, The Baker's Journal** and **Sporting Goods News,** 451 Beaconsfield Blvd., Beaconsfield, P.Q. Authorized as second class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Price 25 cents per copy. Subscription rates are $2.00 per year; $3.50 for two years in Canada. $1.00 extra elsewhere. Address subscription renewals to Macdonald Farm Journal, 451 Beaconsfield Blvd., Beaconsfield, P.Q.

The Macdonald FARM Journal

VOLUME 27 NUMBER 1

JANUARY 1963

CONTENTS

The Next Ten Years 6

Dr. David L. MacFarlane predicts that the next ten years for the Canadian farmer looks fairly good. However only those who are efficient, productive and commercial.

Situation '62 — Outlook '63 13

A special eight page section by David L. MacFarlane and Cecil B. Haver on the agriculture situation in 1962 with an outlook for 1963. This section is self-stapled and may be removed from the magazine for future use.

This Little Piggy . . . 21

This little piggy went to a marketing board is the title of this article. It deals with the marketing of agricultural produce and tells of marketing board functions.

DEPARTMENTS

Market Outlook 3
Inside 4
The Family Farm 8
The Better Impulse 25
The Month with the W.I. 26
Farm Forum News 'N' Views 29
For Your Information 29
Weather Wise 29
Outside 30
What's New 30

ADVERTISERS INDEX

Macdonald Tobacco ..... IFC
Miracle Feeds 7
Classifieds 24
A. C. Lamb & Sons 27
Shur Gain Feed Service Mills 28
Nationale Salon d'Agriculture 28
Ralston Purina Company Limited ..... OBC

THE NEXT TEN YEARS IN AGRICULTURE

by David L. MacFarlane

CANADIANS ARE ASSURED of a mounting debate on the farm industry as it is increasingly realized that a new, vigorous and expensive agricultural programme is not improving the farmer's take home pay. In contrast to the striking financial progress in almost all sectors of the Canadian economy over the post-war period, agriculture has fared badly. Canadian industrial output has nearly doubled since 1949. The number of workers in Canada has risen from five million to 6,900,000 over the same years. Average weekly earnings in all non-farms industries rose from $43 to more than $80.

But the farmer is receiving prices about equal to those of 1949. While his cash income is more than 20 per cent higher than in 1949, it buys 15 per cent less, since the cost of goods and services purchased by farmers has risen by nearly 50 per cent. Net income of farmers (take home pay) has actually declined about 25 per cent measured in current dollars and by more than 40 per cent in real terms. However, when placed on a per farm basis the decline is not as great, since the numbers of farms has fallen significantly. It is estimated that net income per farm fell by about 20 per cent over the 1949 to 1961 period.

This unfavourable position of agriculture results from the manner in which Canada's economy has been growing. Because consumers spend very little more on food as their incomes increase, the rapid rise in non-farm incomes has been of little benefit to agriculture. In other words, a large part of increased income in the hands of consumers is spent on automobiles, television, recreation and travel — on anything but food.

This unfavourable income situation also arises from the remarkably rapid technical progress made by the farm industry over the post-war period. Output per acre, per animal, and per worker have risen sharply. In fact output per man in agriculture has risen about three to four times as fast as in Canada's non-agricultural industry. In the United States this progress has been so rapid that since 1950 the number of persons supplied by the production of one worker in agriculture has doubled — from 14 to 28. A somewhat similar situation has prevailed in Canada. This expanded output falling on an inelastic demand, along with the low response of improved consumer incomes to food purchases, means that farm prices and incomes have been non-responsive and sluggish in a period when workers in other industries were experiencing rapid improvement in their position.

The known technical developments in agriculture are not nearly fully used in Canada, because the unfavourable price and incomes situation has provided little incentive for farmers to make the necessary investments. With even slight improvement in relation of farm prices to costs, much of this new technology would suddenly be released. However, for the next decade at least, really substantial improvement in farm income is unlikely, so that our farm industry will not likely realize anything approaching its potential, barring the development of large scale programmes for the provision of food to the less developed countries.

Even in the face of the discouraging situation of the last ten to fifteen years, farmers have made important adjustments which, while painful, have helped the industry. Since 1949, people leaving farms have cut the numbers of farm workers by nearly 40 per cent. At the same time, new investment by farmers has averaged about $450 million per year. Annual depreciation charges on buildings and machinery have averaged about $285 million. Since there has been little change in the acreage of improved farm land, the above facts reflect the increasing mechanization which has taken place in the industry.

A parallel adjustment of great significance has been the decline in numbers of farms. From 1951 to 1961, according to the Census, the numbers of farms declined from 623,000 to 484,000 or 22 per cent. Thus the remaining farms are larger and of a more economic size. There is still great pressure for farm consolidation and we may expect the trend toward declining farm numbers to be repeated over the next decade.

The large reduction in numbers of farms and the almost drastic decline in numbers of workers indicate strongly that the farm industry is in a period of rapid adjustment toward its declining relative position in the Canadian economy. This is an extremely painful process for the families involved. Perhaps one-third of Canada's farm families are now asking the question: should we stay in agriculture or get out?

As one looks ten years ahead, is the outlook bright or gloomy? First, population is rising fairly rapidly. We should have a population of about 22 million by 1970. While the demand for food always increases a little faster than the population, this will not bring farm production and consumer demand into balance. Expanded output from technological improvement will still be pushing on demand, thus preventing any substantial rise in farm prices.

On the production side, there is more hope. Technological developments in agriculture tend to require large amounts of capital. There will be fewer but larger and more highly capitalized farms, with greater output per worker. If this production increase is achieved with efficiency, the incomes of farmers who make these changes may rise moderately even in the face of sluggish demand.

Thus farmers who achieve efficiency in their operations will have some assurance they may overcome the marketing problems created by more production. The dairy farm which produces 200,000 to 250,000 pounds of milk per man generally has the over-all efficiency to yield a good living even at today's prices. And the wheat farm with an output of 7,000 to 10,000 bushels per man per year will provide a satisfactory living even with wheat at $1.25 to $1.50 per bushel at the farm.

Thus the general prospect for agriculture over the next ten years looks fairly good for efficient, productive, commercial farms. And we expect some improvements even for small farmers due to increased opportunities for off-

uccessful
eeders
cross
anada
hoose
MIRACLE

BRITISH COLUMBIA:

The manager of a large dairy herd must approach his job as a business man. Complete records and production figures help to determine a true profit picture here.

ino Giacomazzi is the son in P. Giacomazzi and Son, Mt. Baker View Farms, Aldergrove, B.C. The B.C.A. average their 80 cow Holstein herd improved from 109-103 in 1958-59, to 144-142 for 1961-62. The Giacomazzis are pleased h this improvement and attribute their success to good management, breeding, and dependable "Miracle" Feeds.

farm work. Of course, we must recognize that in recent years the net income from agriculture on some 200,000 small farms has averaged less than $1,000 per year. Even with greatly expanded off-farm incomes, the position of the operator of the small or subsistence farm will continue to be far from attractive.

The real significance of this outlook is the fact that the farmer with adequate resources of land, buildings, livestock and machinery — and who can manage these resources efficiently — has a good opportunity to beat the economic odds which seem loaded against him.

Any appraisal or assessment of agriculture over the next decade should be set within the context of the agricultural policy which will prevail over this period. Over its four years in office the Conservative government has developed a vigorous agricultural policy. It centers in three areas: (1) putting agricultural price supports on a mandatory basis for nine products; and generally raising the level of supports on these nine products and on several others; (2) a new approach to farm credit; (3) the new rehabilitation and development programme.

The result of the new price support policy has generally been to provide the incentive for expanded production — of which we already had too much. Butter in particular and all dairy products in general are good illustrations of what has happened. Changes in farm credit policy involve pumping very large amounts of government money into the farm mortgage market. The objective is to aid farmers in acquiring sufficient resources to reach units of an economic size. There is a substantial subsidy in the provision of this credit which is charged to farmers at five per cent. While the objective of this programme is very good there is concern that the vast sums of money involved — 69 million dollars last year — must inevitably have the effect of increasing land values and thus farm costs. This large-scale injection of credit into agriculture must also have the effect of expanding production. The agricultural rehabilitation and development programme aims at improving the use of land in the less productive areas of agriculture, which incidentally are the low income areas. This is a very desirable type of programme but is one which can succeed only if the whole economy is operating on a buoyant level. This would provide off-farm opportunities for families now stuck on small, unproductive, and inefficient farms.

This new policy is expensive. In the last fiscal year the federal budget carried a figure of 265 million dollars for agriculture. And in the current year expenditures will be considerably higher. This contrasts to 85-90 million dollars per years in 1955 and 1956.

Rather than providing a framework for attracting resources out of agriculture, the net effect of the present policy is to add resources and to provide incentives for further production. This being the case, it is doubtful over a ten-year period that there will be any substantial opportunity for farm prices strengthening sufficiently so that labour and other production factors will achieve rates of return comparable to those prevailing in other industries.

This brief consideration of agricultural policy leads one to state a proposition that is widely accepted by farm economists, viz.: that by far the most effective way to encourage desirable adjustments in agriculture is by the maintenance of a high employment economy. This provides greater demand for farm products and a climate in which desirable adjustments can be made. Another way of stating this proposition is to say the best agricultural policy objectives can be reached through policies relating to non-agriculture.

THE FAMILY FARM

PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE
BY THE
QUEBEC DEPARTMENT OF AGRICULTURE AND COLONIZATION

Compiled by T. Pickup of the Information and Research Service, Quebec Department of Agriculture and Colonization.

Province of Quebec
DEPARTMENT OF AGRICULTURE AND COLONIZATION
Animal Productions Service

QUEBEC SWINE PROGENY TESTING PROGRAMME

In collaboration with the Quebec Swine Breeders' Association and the Quebec Landrace Swine Breeders' Association.

This month in the FAMILY FARM *Section*

page 8
Quebec Swine Progeny Testing

page 9
Farm Building Ventilation

page 10
Programme for the Improvement of Mink

page 11
Production and Handling of Hatching Eggs

Feeding Roots to Cattle

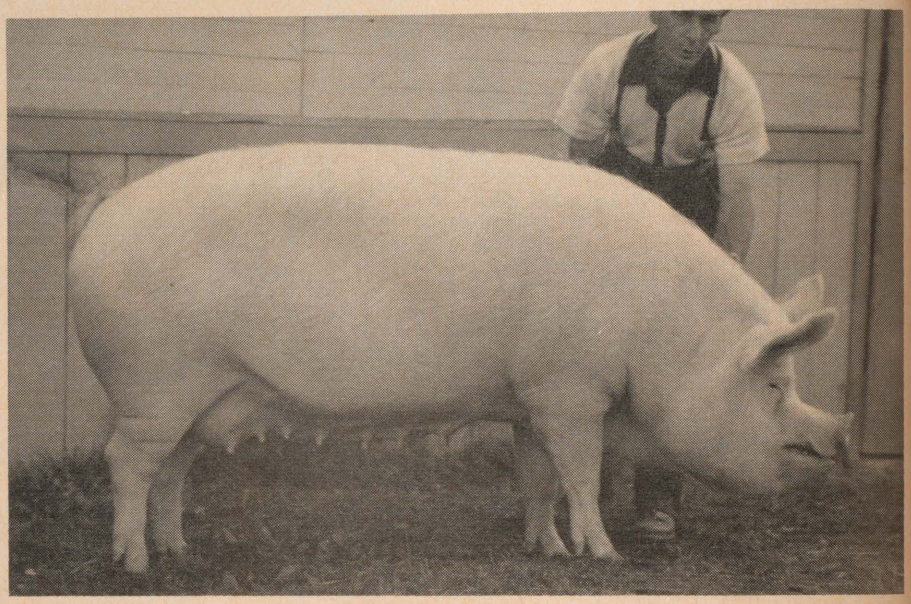
page 12
Guide to the Protection of Ornamental Plants

Mulching Entails the Use of Fertilizers in Orchards

inside back cover

Troubles with Seedlings

Appointment of Mr. Real Martineau



Champion Yorkshire sow owned by Mr. A. Nadeau of St. Agapit, Lotbinière, P.Q.

For some years past, hog raising has played so important a part in the agricultural economy of Quebec that the Department of Agriculture and Colonization and the purebred swine breeders' associations have decided to join forces to improve the industry. The use of improved breeding techniques and other practical methods is urgently called for, so that our hog raisers can be supplied with the kind of breeding stock best qualified to beget thrifty young pigs capable of developing quickly into hogs of the type and quality required by the market and desired by Canadian and American consumers.

OBJECT

The aims of this programme are as follows:

1. To ascertain, maintain, and improve the hereditary qualities of purebred boars and sows, by means of sound selection based on systematic progeny testing of the traits most desirable in a market hog.
2. To provide breeders of purebred swine with the means of finding out the true value of their breeding stock.
3. To discover the best breeding strains.
4. To establish strains whose desirable prepotent qualities have been proved through the systematic progeny of purebred boars and sows.

REGULATIONS

In order to be eligible to take part in this programme, a breeder must: Possess a herd which is free from rhinitis, pneumonia, or any other signs of disease.

Own only breeding animals which are registered in the official records of the breed. Keep a herd book.

Identify all piglets by marking them before they reach the age of eight

weeks. Enter for progeny testing all litters of at least 50% of his breeding sows.

PROGENY TESTS

To be eligible for progeny testing:

A. A sow must have at least twelve teats, be free from whorls, and wean not less than eight piglets.

B. At least 20 days before each sow is due to farrow, the breeder must send an application form in her behalf to the Animal Productions Service of the Quebec Department of Agriculture and Colonization. (Copies of this form will be supplied on request).

C. The breeder must identify and weigh each piglet at the age of 21 days and enter the details on the form with which he will be provided for the purpose. The total weight of the litter must not be less than 90 pounds in the case of a young sow at her first farrowing, and not less than 100 pounds for subsequent litters. The whole litter must be free from abnormalities, whorls, etc.

D. During the visit of an authorized official of the Department, two piglets (one male and one female) representative of the average of the litter, will be designated for progeny testing. These two animals may be fed and reared either by themselves or with their litter mates. Before they reach the age of 181 days, they must be sent together to one of the abattoirs mentioned on the shipping form.

CARCASSES

The dressed carcass must weight not less than 150 pounds nor more than 170 pounds, cold weight. (The maximum live weight would thus be approximately 210 pounds).

Minimum length 30.5 inches

This measurement is taken from the outside of the first rib to the inside edge of the pelvic bone.

Maximum thickness of the layer of loin fat

For carcasses weighing between 150 and 159 pounds: 1.3 inches;

For carcasses weighing between 160 and 170 pounds: 1.4 inches.

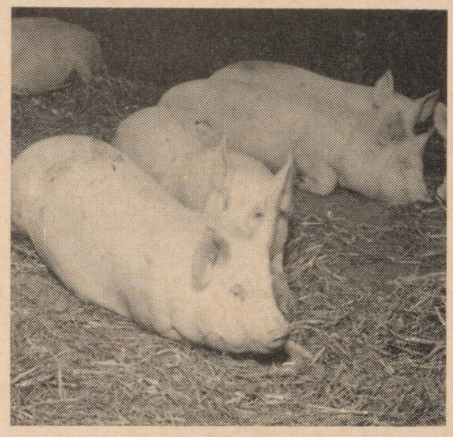
Loin muscle: minimum area in cross-section: 4 square inches

This value is obtained by the measurement of the cross-sectional area of the loin muscle with the aid of a planimeter. (The transverse cut is made at the level of the last rib).

Minimum percentage of choice cuts: 40%

This represents the proportion which the weight of the commercial loin cuts (starting from the first rib) plus the hams, bears to the weight of the carcass.

A uniform lot of young hogs on the farm of Oliver and Eugene Coderre at St. Jacques de Montcalm.



REPORTS

Within eight days of the date of slaughter, a report will be sent to the breeder giving him detailed information of the results of the test.

PROGENY-TESTED SOWS

A sow which has farrowed a number of certified litters shall be officially recognized as a progeny-tested sow, with the following distinctions:

2 certified litters: 1 star
4 certified litters: 2 stars
6 certified litters: 3 stars

PROGENY-TESTED BOARS

A boar which has bred a number of sows, of which not more than two are sisters and whose resulting litters have successfully passed the progeny test, shall be officially recognized as a progeny-tested boar, with the following distinctions:

5 sows: 1 star
10 sows: 2 stars
15 sows: 3 stars

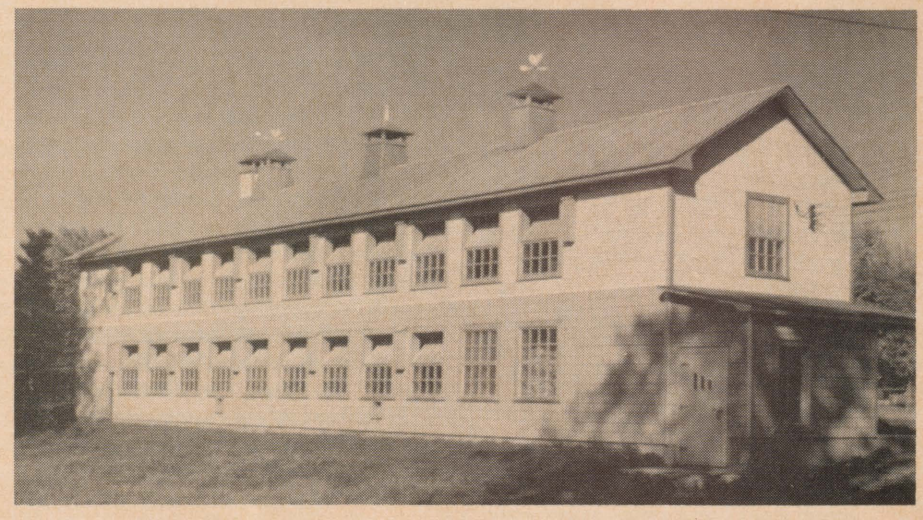
The Deputy Minister of Agriculture and Colonization
Ernest Mercier
QUEBEC, July 30th, 1962.

Are your farm buildings properly ventilated?

It is perhaps scarcely necessary to point out that the aim of ventilating farm buildings in which livestock are kept is to control the quality of the air, so that its temperature, humidity, purity, and movement (in other words, the interior climate of the building) shall be conducive to the health and maximum productivity of the animals. In addition, a good system of ventilation prevents premature decay of buildings and thus reduces their rate of depreciation and the cost of maintenance.

Mr. Bruno Chartier of the Quebec Department of Agriculture and Colonization points out that there are two kinds of ventilation: natural or gravity ventilation, and mechanical or forced.

Natural ventilation comprises several systems, all of which depend for their effectiveness on the change in the density of air as it gets warmer. Since warm air expands as it is heated and thus becomes less dense or "lighter", it presses on walls and ceilings and tends to escape by the first opening it meets. If this opening is a properly constructed flue, the escaping warm air carries with it the moisture and harmful gases. If, in addition, openings known as **air intakes** are made at a number of places in the walls, air from outside will enter and thus the atmosphere inside the building will be purified.



A well-ventilated poultry house at the Montfortain Seminary at Papineauville.

These pages supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.

Mechanical or forced ventilation involves the use of a fan driven by an electric motor and controlled by a thermostat. The motor must of course be moisture-proof and protected against overloading, and the capacity of the fan, in cubic feet of air per minute, must be in proportion to the number of animals. As in the case of natural ventilation, it is necessary to have air intakes at regular intervals in the walls of the buildings. In no case should these be within 15 feet of the fan. In piggeries and poultry buildings, **diffuse air intakes** are recommended. These are designed to baffle cold draughts of air entering the building and prevent abrupt cooling.

Whatever system of ventilation is contemplated, whether natural or mechanical, it is strongly recommended that an expert be consulted beforehand.

It should also be remembered that some unhealthy buildings require more than just the installation of a good ventilation system. In some cases, it is urgently necessary to take into account the general state of the building and modify or reconsruct walls, ceilings, openings, etc., so as to prevent, as much as possible, loss of the heat produced by the livestock. This means that, when a system of ventilation is installed, it is also very often necessary to carry out other improvements in order to make the building warmer by various means, so that the temperature of the surface of the walls and ceiling will be raised above the point at which moisture will condense on them. If this is not done, the ventilation system may prove to be quite inefficient.

All those who are interested are invited to write to the Farm Buildings Division of the Department of Agriculture and Colonization at Quebec for plans which they may need either to construct new buildings or to remodel or repair existing ones.

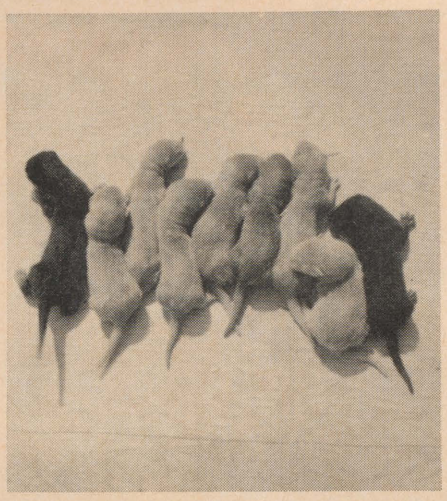
Programme for the improvement of mink

Today more than ever before, profits from raising mink are very closely connected with improvement in the quality of the herd. Unless there is persevering and progressive effort in this direction, the margin of profit decreases year by year. On the other hand, the mink raiser who constantly improves the quality of his breeding stock is assured of increased profits.

Improvement is impossible without strict attention to the hereditary characteristics of the breeding animals; hence the importance — indeed the necessity — of carefully kept records which will enable desirable improvements to be made with regard to quality, size, and fecundity.

QUALITY

1. Mr. Stephen Poliquin, of the fur-bearing animals division of the Quebec Department of Agriculture and Colonization, advises mink raisers to study the merits and faults of the different lines, especially of mutation mink, at exhibitions and study days and during visits to other ranches.
2. When you wish to buy breeding stock, take care to buy the best animals available in each of the mutations you want to introduce into your herd. Be exacting.
3. Learn to do your own classifying and, when choosing breeding animals, do so under a light of regular and uniform intensity.
4. Uniformity of breeding stock means uniformity of pelts.
5. Select with the object of eliminating undesirable traits from your stock, and strive constantly towards an increase in good qualities.



A litter of young mink resulting from the mating of a hybrid female (natural dark x platinum) with a platinum male. On the average, half of the kits from such matings are platinum and half of them are natural dark, platinum being recessive.

6. Mate your best males with your best females.
7. Make the maximum use of the males which have the best qualities.
8. It is most important that you complete your records by means of classification and selection.
9. Choose young breeding stock from your good and most outstandingly uniform families.
10. Choose mature breeding animals on the basis of their progeny, taking into account number and percentage of high-quality litters.
11. Do not kill either too soon or too late. Use methods which are recommended for the preparation of first-class mink pelts.

SIZE

1. Appraisal of the size of mink begins on the day they are born.
2. Keep the females which have shown the most marked capacity for milk production and have taken the best care of their kits.
3. The biggest mink is not always the one with the biggest girth. When selecting for size, pay as much attention to length as to weight.
4. Select for size amongst litters of four to eight young mink which are as uniform as possible in this respect.
5. Size is hereditary in mink. Breeding animals, especially males, should be chosen from lines marked by large size.
6. To encourage growth, give mink plenty of very nutritious food. An inherited tendency towards large size in a strain will not be fully expressed without proper feeding and good management.

FECUNDITY

1. A reasonably large and prolific herd, by affording more animals to choose from, satisfies one of the most important conditions for improvement.
2. The number of kits in the litter depends mainly on the mother.
3. Choose breeding animals from families bearing large (but not unusually large) litters.
4. Choose young breeding animals from litters borne by females with good milking capacity or at least enough milk to feed their families.
5. When selecting young mink for breeding purposes, keep those which give evidence of strong vitality.
6. Mate females from good lines with males from lines possessing desirable qualities.
7. In breeding and line-breeding may result in a reduction of fertility, unless you compensate by a strict selection of the most vigorous animals.
8. Do not keep in your herd small or medium-sized breeding animals merely because they come from large litters.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.

Production and handling of hatching eggs

The production of eggs for incubation calls for attention to certain details which influence hatchability and also profits. Mr. Daniel Bérubé of the Quebec Department of Agriculture and Colonization describes the more important precautions.

During the hatching season, the poultry house should be kept at a comfortable temperature and adequately ventilated: above all, damp litter and overcrowding must be avoided. There should be enough, but not too many, vigorous roosters. Well-balanced, feed fortified with vitamins, will promote and sustain intensive laying and improve hatchability.

It is very important to collect the eggs often (at least three times a day) and to keep them for a short time only in a cool, moist place. A temperature of 50 to 55°F is recommended for storing eggs of the light breeds, and 60°F for those of the heavy breeds. The ideal humidity is about 80%. Cases of eggs should never be left standing in direct contact with a cold floor: they should be placed on shelves or set on studding during the period of storage. Many poultrymen leave the eggs in wire baskets in order to keep them fresher. The period of storage prior to incubation should not be more than ten days and preferably should not exceed a week.

Eggs should be carefully sorted before being sent to the hatchery: those which are too large or too small, deformed, cracked, or thin-shelled should be rejected. In the case of chickens, better results are obtained with eggs weighing about 24 ounces to the dozen and, in the case of turkeys, 32 to 36 ounces per dozen. Since washing may impair hatchability if not done carefully, it is better to provide enough nests and keep them clean. Eggs which are slightly dirty may be cleaned by means of gentle brushing with steel wool. Boxes must be rigid enough and cartons sufficiently solid to prevent breakages during shipment. Hatches of 70 to 80% are now common. If results fall below these standards, the producer of hatching eggs should ask his poultry instructor's advice.

Mrs. Albert Legros of Masham, Gatineau, makes good use of an incubator to hatch her own poultry.

Feeding roots to cattle

Fodder roots are a succulent, tasty, and tonic feed. In spite of their low content of total digestible nutrients, they play an important part in the feeding of livestock because, as is shown by the effects which they produce, their value is greater than is indicated by their chemical composition.

Cattle relish roots and their health is favourably influenced by them. Roots aid the digestion of other feedstuffs, thereby increasing the amount of nutrients absorbed by the animals, so that more food is available for production after requirements for the maintenance of bodily tissues have been satisfied. Thus the feeding of roots can lead to increased yield of milk, meat, etc., writes Mr. Bruno Gélinas of the Quebec Department of Agriculture and Colonization.

The laxative effect of roots helps to reduce the amount of expensive concentrates (such as bran and lindseed cake) which it may be necessary to buy, and which add considerably to feeding costs. Moreover, the very fact that succulent feeds such as roots contain a high percentage of water enables them to contribute to the well-being of those animals which are only given a chance to drink once a day.

It is more advantageous to feed succulents during the period when animals are confined to the barn than when they are out on pasture. However, if cows are getting good legume hay, and concentrates rich in carbohydrates, their milk yield is likely to be as satisfactory without roots. But if the forage is not of the best quality (as is mostly the case) the addition of succulents to the ration will compensate, up to a certain point, for the shortcomings of the hay.

To those farmers who use silage made from corn, grass, etc., the growing of fodder roots is less important. Roots are more suitable for farms where the herd is not large enough to justify the construction of a silo and the purchase of the machinery necessary for making silage. It has actually been found that the addition of roots to a diet containing silage has resulted in an increase in milk yield by an amount which would be worth while in the case of cows being fed to establish high milking records. For dairy herds in general, however, this increase is not enough to balance the cost of growing roots for feeding in combination with silage.

Fodder roots should be fed sliced, at the rate of 20 to 25 pounds per cow per day.

Guide to the protection of ornamental plants

The latest edition of the "Guide to the Protection of Ornamental Plants" is now available for distribution. Copies may be obtained, free of charge, from the Information and Research Service, Department of Agriculture and Colonization at Quebec or at 306 Craig Street East, Montreal 1.

The new guide clearly and briefly gives up-to-date information about pests and pesticides under the headings:

General information
Common pests
Specific pests
Tree surgery
Lawns
Recommended pesticides.

The section on specific pests occupies two thirds (29 pages) of the manual: in it, descriptions of the commoner pests and disorders, and directions for prevention and treatment are given for over seventy plants (beginning with African violets and ending with Zinnia).

The scope of the publication is somewhat wider than the title suggests. Among the ornamental plants dealt with are: house plants, including old favourites like Cactus, Geranium, and Sansevieria (the plant with spiky leaves otherwise known as "snake-plant", "mother-in-laws' tongues", or "the barroom orchid"); trees and shrubs, including birch, caragana, elm, fir, and maple; and greenhouse flowers such as carnations, snapdragons, and chrysanthemum.

Methods and rates of application are given for modern pesticides now in general use, but time-honoured and effective ways of prevention and treatment are not overlooked. Thus, directions for the control of Black rot (Sclerotinia rot) of Iris are given as follows: —

"Leaves do not always emerge in spring; if they do, they turn yellow, wilt and die. Plant only healthy rhizomes; choose an alkaline soil or apply lime. Practice a rotation of 3 or 4 years. As soon as the plants emerge, apply a first treatment of CAPTAN (2 tablespoons per gallon of water) at the rate of 2½ gallons of the liquid per square yard. Repeat 2 or 3 times at intervals of 8 to 10 days."

— and for Bulb mite of lilies: —

"A small mite which attacks the roots, thus causing yellowing of leaves and stems. Store bulbs at 35°F. Follow a rotation. Plant only healthy bulbs in a well-drained soil. Immerse suspected bulbs in water at 111°F for one hour, or dust them with MALATHION 4-D."

(Among the old-fashioned but certain remedies not mentioned is the one which was once advertised under the heading "Send one dollar for sure way to kill cutworms". Unwary customers received a parcel containing two blocks of wood and the directions, "Place cutworm on block A and hit with block B.)

We believe that professional and amateur gardeners, greenhousemen, and many others will find this manual useful and convenient. It is available in both English and French. If the English version is required, please ask for Publication 268-A.

Mrs. Louis Dinel cutting flowers in her garden in Papineau County.

Mulching entails the use of fertilizers in orchards

In most orchards in the Province of Quebec, grass is allowed to grow between the rows of trees, and is cut two or three times during the course of the season and left lying on the ground. This is known as the sod mulch system. Sometimes a few tons of straw are added, in the form of a mulch encircling each tree-trunk.

This method of orchard management leads to significant changes in the soil, especially as regards nitrogen. The amount of carbon in hay and straw is large in comparison with their nitrogen content. In transforming the hay and straw into humus, certain micro-organisms in the soil narrow this wide carbon/nitrogen ratio down to about 10:1, largely by converting the carbon into carbon dioxide. In so doing, the micro-organisms multiply rapidly and, soon after the hay and straw are applied, they compete with the trees for the comparatively small amount of nitrogen ordinarily available in the soil. The resulting reduction in the amount of nitrogen in the tissues of the trees may lead to a more or less serious deficiency, depending on the reserves in the soil.

Mr. Gilles Lasnier of the Quebec Department of Agriculture and Colonization points out that it is advisable to compensate by adding a certain amount of nitrogen. Enough of a suitable fertilizer should be added to supply 18 pounds of nitrogen per ton of straw. It should be applied at the time of the first mulching and this practice should be followed for a year or two. Problems which may ensue from a decline in the nitrogen content of the trees will thus be avoided.

The subsequent gradual release of nitrogen at a later stage in the decay of the mulch may, however, result in another critical period in the fertilization programme, because the amount of nitrogen which then becomes available to the trees may thereby be increased above the optimal level, unless allowance is made for the increase by means of a reduction in the amount of nitrogen applied in the form of fertilizer. The reduced rate of application must be kept to, as long as the level of nitrogen remains above normal.

Some apple growers tend to neglect the application of nitrogen altogether. This is a severe measure which, in the overwhelming majority of cases is not recommended. It is only in extreme circumstances that nitrogen can be entirely omitted from a programme of fertilization.

More Family Farm on page 31

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.

The Macdonald FARM Journal

JANUARY 1963
SPECIAL SUPPLEMENT

THE CANADIAN FARM SITUATION 1962 AND OUTLOOK FOR 1963

by

David L. MacFarlane and Cecil B. Haver

Macdonald College, McGill University

THE CANADIAN FARM SITUATION 1962 AND OUTLOOK FOR 1963

by

David L. MacFarlane and Cecil B. Haver

Macdonald College, McGill University

This special supplement to the Macdonald Farm Journal is stapled on its own apart from the remainder of the magazine and may easily be removed for those who wish to retain it for future reference.

CONTENTS

Highlights page 14

Government and Industry Policy page 15

World Economic and Export Outlook page 15

Farm Prices, Costs and Incomes page 16

Commodity Analysis page 17

What the Outlook Means to the Farmer page 20

HIGHLIGHTS

General Economic Prospect: Slowing in rate of growth of the Canadian economy from the rapid advance of the past year. Necessity to remove some austerity measures could accentuate difficulties. Unemployment still high and new private capital investment very low.

Agriculture: Weaker prices for several major products will more than offset larger marketing of grains in 1963 compared with 1962. Cash income in 1963 expected lower than 1962, and farm costs expected to continue upward trend. Real net income (take-home pay) expected to be down five per cent or more.

Wheat: Exports down 1962-63 crop year and prices weakening.

Hogs: Will hold up pretty well until autumn 1963; then watch out.

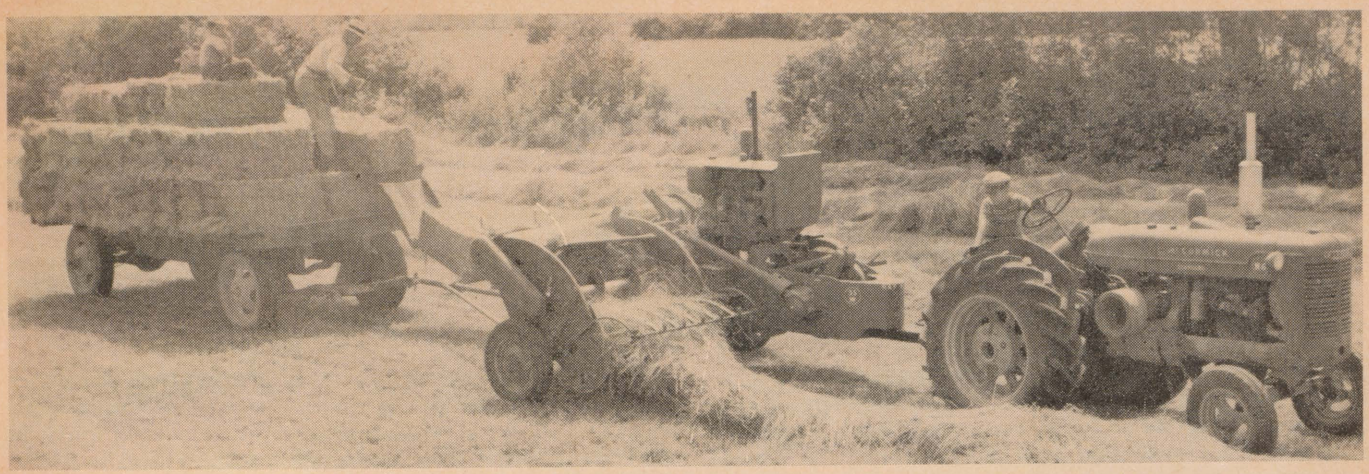
Beef: Prices strong through the spring; weakening in summer and autumn.

Eggs: Prices strengthening until the autumn of 1963; then weaker.

Poultry Meat: Prices strong until summer of 1963; lower into 1964.

At this time of year when farmers, government officials, and industries serving agriculture are considering plans for 1963, it is appropriate that an independent college should review the year 1962 and evaluate the prospects for Canadian farm production, marketing, farm prices and income for 1963. Such a statement aids in placing farm operating and agricultural business decisions in an economic context set by expectations of prices and costs, by inflationary or deflationary trends, by the effects of changing production and marketing techniques, by changes in consumption, by government programmes, and by other economic factors.

The dominant factors which will influence farm output and incomes in 1963 and of which account may be taken are (1) the income which non-farm workers will have; and (2) the volume and prices of our exports. Thus the most important task is to estimate the amount of income that Canadian families will have in 1963 and the amount they will spend on food and other farm products. This essentially requires making projections of the gross national product of the country for 1963 and of disposable income of households and individuals. It is clear that these, in turn, depend upon the policies followed by major industrial employers and by government. What will happen in these areas, particularly the latter, is now largely a matter of conjecture. The economist confronts these uncertainties by making very explicit assumptions with respect to them. The projections of an outlook statement are consequently no better and no worse than these assumptions with respect to government and industry policies.



Government and Industry Policies

The question of the prospective national economic climate for 1963 may first be approached by reviewing what has happened in 1962 and relating this to the policy measures which are expected to operate in 1963. The changes in the most important national economic measures over the past twelve months are presented below. These show percentage changes for one year ending on the indicated date (coinciding in all cases with the most recent statistics available); or they relate to an explicit time period compared to the corresponding period one year earlier:

1. Total Volume of Industrial Production, January - September, Up 8%.
2. Gross National Product in Constant Dollars, January - June, Up 8%.
3. Personal Expenditure on Consumer Goods and Services in Constant Dollars, January - September, Up 6%.
4. Total Non-Farm Employment, November 17, Up 3%.
5. Industrial Employment Index, August, Up 2%.
6. Unemployed, Seeking Work, 324,000 on November 17 compared to 331,000.
7. Department Store Sales, January - September, Up 3%.
8. Consumer Price Index, November, Up 1%.
9. Wholesale Price Index, November, Up 3%.
10. Commodity Exports, January - October, Up 9%.
11. Commodity Imports, January - September, Up 13%.
12. Canadian Farm Price Index, October, Up 4%.
13. Farm Costs, April, Up 4%.
14. Canadian Cash Farm Income, January - June, Up 2%.
15. Canadian Cash Farm Income, January - June, in Constant Dollars, Down 2%.

The Canadian economy has experienced a vigorous advance since the third quarter of 1961 — but not enough to bring it to a full employment level. The advance came after an 18 month recession period when the economy was stagnant with five to eleven per cent of the labour force unemployed. This rate has fallen to the level of four to four and a half per cent — still too high.

The improved position of the economy is not without disturbing elements — particularly so far as its continued health is concerned. In the first place, new industrial capital formation has been very sluggish during the recent advance. As the Canadian Imperial Bank of Commerce notes: "the proportion of the nation's output devoted to investment in the first half of 1962 was only 17.5 per cent, one of the lowest figures in many years". High investment is generally a key factor in periods of recovery and expansion in a modern economy. Further the foreign exchange crisis leading to devaluation of the Canadian dollar, the large tariff surcharges, and other austerity measures present difficulties which must be faced in the fairly near future. Presently our export economy is producing the results indicated above on the basis of a 7½ per cent devaluation. This gives Canada a very distinct advantage over competing export countries. Similarly the tariff surcharges constitute a very real advantage to Canadian industries supplying the domestic market. But because of the impact of the surcharges in raising the costs of firms producing both for the domestic and export markets, they will worsen the competitive position of all Canadian firms when these measures are removed — as they must ultimately be.

The American economy has not shown a rate of growth comparable to the Canadian over the past year and a half and there is among the experts an undertone of pessimism about 1963. This factor, in addition to threatened further restrictions against imports from Canada, may well adversely affect Canadian exports and thus the whole Canadian economy. Considered in conjunction with the disturbing factors noted as accompanying Canada's recent economic advance, we do not look for a continuation of Canadian economic growth at the rate of the past 18 months.

While in a rapidly expanding economy, few of the benefits of the growth are conferred upon agriculture, the position of farmers is adversely affected when growth is very slow or absent. Thus in the first six months of 1962 consumer expenditures on food increased by 1.3 per cent over previous six months, whereas in the earlier 1961 period the quarter to quarter expenditure remained almost unchanged. However it must be recognized that a large part of any increase in expenditures on food goes into marketing services and not to farmers. For 1963 it is expected that national expenditures on food will increase by one to two per cent, but that expenditures on food at the farm level will remain almost unchanged.

World Economic and Export Outlook

We have noted that the pace of economic growth in Canada and the United States in recent years has slowed down. This can also be observed in Western Europe including the European Common Market countries. In fact, some noted international economists have suggested that we may face a period of gentle deflation which would affect most or all of the highly developed countries. There is the further circumstance that the probable impact of

the acceptance of the Common Market agricultural policy and the possible inclusion of the United Kingdom in the Common Market throw a general atmosphere of uncertainty and even pessimism over the prospects for Canadian agricultural exports to Europe. The common agricultural policy which would be adopted in stages between now and 1970 is highly protectionist and in its present form could lead to even greater agricultural self-sufficiency within the region of its present adherents and the half dozen other countries which have applied for full membership or may shortly do so. The United States government has openly expressed concern about the possible impact of the present common agricultural policy on its exports of farm products, and the Secretary of Agriculture recently threatened retaliation against the Common Market countries if U.S. exports to that region are reduced. That country will shortly attempt the use of its new Foreign Trade Expansion Act in an effort to secure reciprocal tariff reductions which would be of benefit to the United States. These would, of course, benefit Canada also, but the whole trade situation affecting Canadian farm exports would be improved if our government approached the problem with a level of thinking comparable to that implied in the new United States legislation.

While contracts to sell wheat and barley to the Chinese Republic have very considerably aided our position in these grains, we are encountering increasing competition for that market from some half dozen countries including France. The military situation which exists between China and India has aggravated the uncertainty that sales on credit might involve losses to the Canadian government. Thus the Minister of Agriculture recently suggested that Canadian farmers might establish a fund which could be used to assist in meeting contingent losses.

While there are many intangibles in the world economic and export outlook, it appears reasonably clear that foreign markets in 1963 will not be as bouyant as in 1962.

Farm Prices, Costs and Incomes

To farmers this prospective situation means a fairly strong domestic demand for their products. About one-fourth of all personal disposable income is spent on food. But in contrast to domestic demand, exports will not likely maintain their 1962 levels. This, as we shall see, is largely due to a less favourable wheat outlook and an expected downward trend in some livestock prices. Cash income from farm products in 1961 was six per cent over 1960. However in the first six months of 1962 this figure was less than two per cent higher than the same months of 1961. This will improve in the latter half of the year. Government payments through price supports and supplementary payments have become increasingly important being 75 million dollars in 1961 and 67 million in the first half of 1962.

For reasons explained in the following commodity analyses we believe that the prices of some major farm products will weaken a little in 1963 and, while the prices of other products will strengthen somewhat, on balance the index of farm product prices will be a little lower in 1963. This price projection accompanied by an indicated reduction in export wheat sales will likely lead to a slightly lower cash farm income for 1963.

On the side of costs it is expected that the steady rise in farm costs will continue. This figure increased by four per cent from April 1961 to April 1962. Because of the projected slower growth of the Canadian economy for 1963, the increase in farm costs may be only two to three per cent. Faced with the prospect of a lower cash farm income and higher costs, the real income of the agricultural sector could drop by five per cent or more in 1963. It should be clearly understood that these projections are based on the following assumptions:

(1) The slower growth of national income projected above;

(2) No change for the worse in the international situation; and

(3) The effect of price support policies on 1963 incomes to be about the same as that for 1962.

So much attention is focused on the cash farm income of Canadian agriculture that sight is often lost of what is happening to net farm income — which after all, is the farmer's take home pay. In each of the past three years Canadian real net farm income has been less than one billion dollars in terms of dollars of 1949 purchasing power. This contrasts with an average more than 1,400 million dollars in the period 1946-48 and more than 1,100 million in the period 1953-55. Of course, the sharp decline in numbers of farms over the post-war years affects the income per farm. But the real net income per farm has declined sharply over the years referred to above, while the real incomes of non-farm families has risen very substantially.

The unfavourable experience of agriculture from an income point of view reflects the way in which a rapidly expanding technology is pressing on a slowly growing demand. Thus the basic problem of agriculture is one of an excess of resources employed in the industry in view of the rapid gains which are being made in technology. Because of the nature of forces operating on the supply of food and on its demand, there is little possibility of early relief from the income situation of the past ten to 15 years. What is important is that farm policy should promote adjustments which will tend to balance the resources in agriculture with the prospective demand for its products. But it must be admitted that even the farm policies of the past four years have made little impact on the income problem — and may even have worsened the situation by encouraging the retention in agriculture of resources which might otherwise have left the industry.

A review of Canadian farm policy in connection with the longer run (ten years) outlook for Canadian agriculture is presented in the January 1963 issue of the Macdonald Farm Journal.

COMMODITY ANALYSIS

Wheat: The past two crop years (1960-61 and 1961-62) saw Canadian wheat exports at the highest level since the early 1950's. Because of this and a partial crop failure in 1961 stocks of wheat were at modest or manageable levels by July 31, 1962. The larger exports of the past two years were also accompanied by a strengthening of prices due to (1) the devaluation of the Canadian dollar and (2) the expanded demand both in Europe and Asia. Thus since May of 1962 the price of No. 1 Northern basis Fort William has been close to $2.00 per bushel.

World wheat production in 1962 is estimated at 8.5 billion bushels, the second highest on record. The crop in Western Europe is estimated at a record of 1,550 million bushels, 290 million bushels above the small 1961 crop. However, stocks on hand in the four major exporting countries on October 1 were seven per cent less than the previous October. Due in part to the small 1961 crop and to the food crisis in China the total volume of wheat and flour trade in 1961-62 was 180 million bushels higher than in the previous year. During the last crop year Argentina and France joined Australia and Canada as substantial exporters to the Chinese Republic, and increasing competition in that area appears in sight. In the same crop year United States exports moved to an all time record of more than seven hundred million bushels. Most of this represented special surplus disposal deals and giveaways, while less than one-third was dumped into commercial export channels for payments in dollars. (In these times the economist's definition of dumping — selling abroad at a lower price than in the domestic market — has almost been forgotten).

The United States government projects a substantial decline in world wheat trade during 1962-63 with very vigorous competition for existing markets. Actually it estimates that import requirements may decline by as much as 150 million bushels, mainly to Western Europe, North Africa and parts of Asia. The projected decline in imports to Western Europe alone is estimated at 100 million bushels. The changed export prospect.

It would be noted from the table below that Canadian exports in the last two crop years have been in the range of 350 million bushels, the first time in some ten years that exports at this level have been realized. In view of the projected decline and total world demand it is projected that Canadian exports may fall to the neighbourhood of 300 million bushels or even less. In the August 1 - November 28 period Canadian Exports were down some 34 million bushels from those of the corresponding period of the previous year.

The small 1961 crop accompanied by large exports in the 1961-62 crop year brought the carryover of Canadian wheat to less than 400 million bushels for the first time in ten years. It appears then that as a result of the large 1962 crop and projected smaller exports that the Canadian carryover will rise to the range of 500 million bushels. However, larger projected marketings by farmers in 1963 will have the effect of improving cash income in that year.

Coarse Grains: As a consequence of the crop failure of 1961 Canada was a net importer of oats in the 1961-62 crop year. The 1962 crop of 494 million bushels was one of the largest in the past ten years. However, stocks in commercial positions on November 28 last were only 39 million bushels. Thus, we expect a sharp increase in marketings over the balance of the crop year. Supplies of oats are adequate to meet feed requirements, this being reflected in the fact that current prices basis Fort William are about 13 cents a bushel less than a year ago.

The barley crop of 166 million bushels was nearly 50 per cent larger than the previous crop. Carryover stocks on August 1, 1962, 58 million bushels, were lowest in more than ten years. Together these facts suggest that

Crop Year	Production	Beginning Inventory	Total Supply	Exports Wheat and Flour	Domestic Disappearance	Ending Inventory
1951-52	544	189	743	356	170	217
1952-53	702	217	919	386	150	383
1953-54	634	383	1,018	255	144	619
1954-55	332	619	951	252	162	537
1955-56	519	537	1,056	312	164	580
1956-57	573	580	1,153	264	155	734
1957-58	392	734	1,126	320	157	648
1958-59	398	648	1,046	294	164	588
1959-60	445	588	1,033	277	156	600
1960-61	517	600	1,117	353	156	608
1961-62	283	608	891	358	138	396
1962-63	558	396	947	300*	150*	497*

*Estimated

supplies for 1963, while expected to be adequate, will not more than meet domestic requirements, reduced exports and provide a normal carryover next July. The tighter situation in barley is reflected in the fact that over recent weeks barley prices have been close to those of the corresponding period of 1961.

The 1962 corn crop of 32 million bushels was large. Because of the shortage of other feed grains in the 1961-62 crop year, corn imports were nearly 30 million bushels.

Feed prices are expected to continue at about present levels over the balance of the 1962-63 crop year, but with some increase during the period in which navigation is closed. Supplies of oats and barley in Eastern Canada are not adequate, and large quantities of these grains will have to move East by rail. The failure of co-operatives and the private trade to stockpile oats and barley in Eastern Canada prior to the close of navigation has become a major farm policy issue, and federal action on this issue is expected this winter.

Dairy: During 1962 dairy policy became increasingly politically oriented — a situation which will continue in 1963. The unrealistic 64 cent support on butter has continued since 1958 and butter surpluses have continued to accumulate. On October 1, 1962 butter and butter oil stocks in Canada were 238 million pounds compared with 90 million pounds in October 1957 before the 64 cent support became effective. Butter consumption has fallen at nearly one pound per capita per year over the same period. This in itself is sufficient to account for the difficulties with which the industry has been and is now confronted. To face this problem the government established a consumer subsidy of 12 cents per pound — selling at 52 cents butter which was put into government stocks at 64 cents. The success of this subsidy in enhancing consumption has been moderate, but there is some question whether or not it will survive in view of the efforts of government to reduce overall federal spending. The annual cost is estimated at between 35 and 40 million dollars a year.

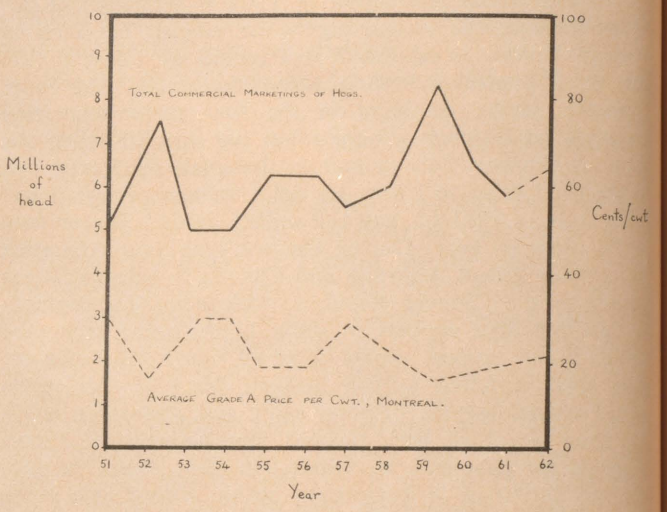
The Minister of Agriculture threatened substantial reduction in support prices in 1963 if the provinces of Ontario and Quebec did not succeed in establishing provincial marketing plans which would help to contain total milk production, and thus take the pressure off butter. The province of Ontario made an effort to develop such a plan but gave up when some major producer groups would not accept the draft plan. Ontario and Quebec take the general position that the difficulties in the dairy industry, and particularly those relating to butter, represent a national problem. Thus, it is encouraging that the government is expected to call a conference of interested parties early in 1963 to determine upon a new dairy policy for that year.

It is encouraging that total milk production in 1962 will represent virtually no increase over that of 1961. This compares with a four per cent increase in production from 1960 to 1961. The fortunate fact that the increase in 1962 is negligible is due in part to adverse pasture and haying conditions and to the favourable beef situation. Actually in a national overall sense prices to farmers were about equal to those of 1961 or a little higher.

In the first ten months of 1962 butter production in Canada was 323 million pounds compared with 313 million in 1961, an increase of three per cent. In the same period cheese production totalled 101 million pounds, down three per cent from 1961. These figures reflect an improper relative balance in the price support programme. One would expect supports which would have the result of diverting milk from butter to cheese.

Because of the secular decline in consumption of butter, the future of the dairy industry is sometimes described as very acute. This position we do not accept. But concerted co-operative action by the federal and provincial governments and by producer groups is required. This well could be along the following lines: (1) marketing plans involving strong price penalties to discourage or prevent production of large amounts of surplus or manufacturing milk by fluid producers. To achieve this may require scrapping quota plans which by their nature encourage the production of milk in excess of the needs of the fluid market; (2) reducing the support on butter by small stages as a means of encouraging a small reduction in total output and shifting milk from butter to other uses. Cheese and dried milk can be disposed of outside the country, butter cannot; (3) application of much more severe quality controls at the farm and first sale level; (4) assisted programmes to convert dairy herds to beef. This is possible by giving free beef bull artificial insemination service to dairy farmers, and by vigourously developing community pastures in dairy areas under A.R.D.A. The dairy problem of the next few years is manageable, but this will require vigourous action on several fronts.

The outlook for 1963 is for the price of milk to farmers to be on about the same level as in 1962, barring changes in support levels or action along one or more of the lines indicated above.



Hogs: The Canadian hog production picture has been altered by certain factors that have upset the typical hog cycle. Hog numbers were down and the price was up in 1961; therefore one would have expected increased hog production in 1962 (we got that — 4 per cent more) but we did not experience lower prices. The cumulative national average price of Grade A hogs to November 10 was $28.07 per 100 pounds compared with $27.41 in the same period last year.

The factors that altered the price were: (1) the feed problem in Western Canada, actually the western provinces drastically cut their hog herds; (2) good hog prices were little inducement because the Western farmer lacked grain. In the East, farmers expanded their production in response to the higher hog prices, however higher feed prices undoubtedly cut their profit margins. The currency devaluation did not aid hog producers directly by stimulating hog and pork exports, but it did aid indirectly by substantially cutting beef supplies and raising beef prices in such a way that hog prices rose rather than fell in a year when marketings were increased.

The Agricultural Stabilization Board found its job an easy one as far as hogs are concerned, 1962 being the second year in a row when the average national price exceeded the national support level of $23.65.

The outlook for continued high prices for hogs in Canada should carry through till the fall of 1963. Some price weakness will occur in the spring of 1963 due to increased marketing, but continued beef price strength should support the hog market. However, by the fall of 1963 the western hog producer will have returned to the market in full force and the eastern producer too, after two years of favourable prices will have increased his production again with the result that fall 1963 prices will drop drastically, certainly below the national support level.

The national average price until the fall of 1963 will very likely exceed the support level; however, the next support period, 1963-64, will undoubtedly see the Board issuing deficiency payments.

Under the new Agricultural Stabilization Board the hog market has returned to a volatile market, very much affected by the forces of supply and demand — more so than was the case under its previous support programme. The producer receives price protection on only the first 100 grade A and B carcasses produced — after that he is at the mercy of the market. Therefore, watch the hog market closely in the coming year. It will undoubtedly break when fall marketings arrive. United States hog production is also increasing, and they too expect summer price weakness and autumn price breaks. We do not project continued high beef prices, marketings are projected to increase and prices are expected to be lower. The same is true for broilers and turkeys. 1962 has been a year of shorter supplies and higher prices. 1963 is projected to be a year of increased supplies and lower poultry meat prices. Therefore the hog producer must be wary; cull sows and boars before fall, sell feeders in the spring and summer months unless your feed and other costs are low enough to guarantee a profit at substantially reduced prices.

Cattle and Calves: The overall production of meat and its domestic disappearance in Canada did not change much from the two billion pound level that it has attained in the last two years. The total production and supply of meat will in all likelihood be higher in 1963, the increase coming from cattle and hogs.

Cattle prices, particularly feeder cattle, were substantially aided this year by increased demand for feeders in the United States market. While we expect this to continue in 1963, the number of cattle involved and the total impact on Canadian cattle prices will be considerably less than in 1962. Part of the price increase in 1962 was due to decreased marketings, to increased exports, and to increased farm holdings. However, the cattle market is in a strong position and with national income projected to increase the consumption of beef, and with gradually increasing population, the short and long-rum prospects for the cattle producer are good. Our short-run forecast of reduced prices on all grades and types of beef indicates a short-run cyclical situation in this market, price prospects in the latter half of 1963 being roughly ten per cent lower than in 1962. Finished beef is in relatively short supply due to substantial exports in the latter half of 1962. Thus prospects to midsummer 1963 will be favourable; however, feeder and other cattle may anticipate weakened demands and lower prices as the year progresses.

Net marketings of cattle in 1962 declined two per cent from the previous year. Numbers of cattle on farms increased 1.2 per cent. The Canadian cattle situation was considerably strengthened this year due to a combination of developments south of the border and our currency devaluation programme. The heavy exports to the United States in 1962 will undoubtedly affect market supplies in 1963, and thereby strengthen prices. However marketings are projected to increase substantially; this increased marketing may generate enough price weakness to discourage further herd enlargements and thus put thirty to forty thousand more head on the market. Cattle marketings in Canada have been increasing steadily since the early 1950's. This past year's decline may record a long-postponed downward trend in the cattle cycle. However, United States cattle numbers are still building up. The United States cattle market conditions in and of themselves are not going to offer much support to Canadian cattle prices. However, if we continue with a devaluated dollar, this may continue to attract American purchasers for both feeders and breeding stocks, and thereby provide substantial support to the Canadian cattle market.

Per capita beef consumption in Canada appears to have dropped slightly in 1962, but consumer demand was strong even in the face of price weakness affecting poultry meats.

Marketings of veal calves are expected to increase moderately in 1963 even as this nation's dairy cow numbers continue to decline, the increase coming largely from the West where less favourable beef prices will induce sales of calves as vealers. The export market represents only a small part of veal calf disappearance, and this market has remained relatively constant. Therefore no appreciable price changes are forecast, the seasonal price patterns will continue as has been the case in this market.

Thus we project some weakness in the nation's cattle markets in 1963; lower prices are forecast particularly as the year progresses. The same seasonal price patterns will of course prevail. A significant change in the United States cattle situation could affect our forecast and another manipulation of the value of the dollar similarly would affect the cattle prices. Another devaluation would surely increase prices whereas restoration of the dollar toward par with the United States dollar would substantially cut Canadian beef prices.

Eggs and Poultry: The prospects for the poultry industry in Canada in 1963 are mixed. In the past year the weighted average price for Grade A large size eggs for the most recent period was 33 cents per dozen, one cent below the national average support price of 34 cents. Thus the Agricultural Stabilization Board will be paying one cent per dozen to eligible producers up to a maximum of 4,000 dozen eggs. Production in 1962 was two per cent higher than in the previous year. Prices appear to have averaged two cents a dozen or four per cent lower than the previous year. Unfavourable returns from egg production in 1962 resulted in reduced hatchery placement of chicks. Therefore egg production in the first half of 1963 at least will be below that of 1962, and while producers may retain older layers and while average production from hens is increasing, both of these factors will not change the supply situation enough to prevent producers in 1963 enjoying an egg price two or three cents above 1962.

The number of layers on Canadian farms is expected to be down two per cent during the coming year. Production per layer will, as has been the case in recent years, be up another two per cent. The combined effect will result in a slight decrease in egg supplies. National income and disposable income too, we expect to increase moderately in 1963. Population is likewise slated for a 1½ per cent increase, while finally egg consumption per capita is not likely to increase. The combined effect of these variables on the demand side will result in a two per cent increase in the demand for eggs. The effect on the egg producer will be increased egg prices during the coming year. The Agricultural Stabilization Board will be relieved of the responsibility of paying deficiency payments to Canadian egg producers.

The egg situation will change again in the fall of 1963 to a position relatively unfavourable to producers. This situation will continue through the spring and summer of 1964. With or without the price stabilization programme, farmers are still operating on a two-year poultry cycle, a year of favourable income being followed by a year of unfavourable income. However, the nature of the deficiency payment programme, now used by the Agricultural Stabilization Board is that consumers take all the eggs produced at prevailing prices and the nation is no longer plagued by large government storage operations to aid in maintaining egg prices.

Poultry Meat — Broilers and Turkeys: The production and consumption of poultry meat have both been on an upward trend, a trend that was slowed in 1962 but is expected to pick up in 1963. Poultry meat production in 1962 amounted to 556 million pounds, two per cent less than the record 567 million pounds produced in 1961. In that year prices were particularly unfavourable in the fall months for both broiler and turkey producers, resulting in a cut back in 1962 production. Prices, however, in 1962 have been favourable enough to encourage producers to expand production significantly. We forecast reasonably strong turkey prices until the arrival of the 1963 production in the fall of 1963, at which time prices again will break, and turkey farmers will experience low and unsatisfactory returns. However, prices will probably not be as low as those experienced in the fall of 1961.

Broiler chicken producers are enjoying relatively high prices at the present time. We forecast price breaks for the summer and fall of 1963. As is the case with turkeys our price forecast is based upon the observation that farmers still respond quickly to high prices and profits in broiler chicken production, thereby increasing broiler deliveries, thus depressing broiler prices. We should add that producers will as they have in the past, react in turn to these lower 1963 prices and set up a condition in 1964 that will provide its producers in turkey and broiler production at that time with favourable prices.

The poultry industry has and is experiencing rapid changes in growth and technology. Growth in production is expected to continue; new producing areas are replacing old. Farmers in the poultry industry should make every effort to remain as flexible in production as possible, and be prepared to contract as well as expand their operations — that is they should be prepared to drop out for a broiler placement when heavy overall placements indicate unprofitable prices ahead. Turkey producers too as well as adjusting flock size can start poults that are two-way propositions, i.e., can be marketed as lightweight birds or heavies. If overall expansion of the industry suggests unprofitable final market prices, market at least some of your flock as started poults — often others do not want to heed obvious market warnings.

WHAT THE OUTLOOK MEANS TO THE FARMER

This outlook analysis suggests that 1963 will not present as favourable conditions for agriculture as the previous year. While this conclusion is warranted for the industry, it must also be observed that on the average the net income per farm will decline only slightly in 1963. This can in part be attributed to the continued trend in farm consolidation.

The outlook situation in the main presents farmers with challenge to strive on for greater efficiency in their own operations. To obtain these improvements in efficiency involves careful re-planning of the organization of the farm — the use of land, rotation systems, adapting livestock to crops produced and to available labour, using full and effective utilization of labour. It means studying the farm business so as to use the most economical feeding and breeding practices, the most profitable fertilizer applications and optimal machinery combinations. In the farm extension workers of Canada, farmers have available to them a group of highly trained and practical men who will willingly work on these problems.

This little piggy went to a MARKETING BOARD

David L. MacFarlane

WHEN IT COMES to marketing farm products or anything else the economist's ideal is for a competitive market — many sellers, many buyers, a standardized homogeneous product, adequate market information, and so on. This implies a minimum of government intervention at any stage.

But we cannot realize these conditions in agricultural marketing or anywhere else. For many products there are only a few buyers, products are not standardized or homogeneous, market information is far from complete. In addition, faced with the slow growth in the demand for food and with a rapidly developing technology, surpluses of farm products are almost always present or threaten to be. In an effort to overcome these difficulties we have a wide range of private marketing machinery, co-operatives, and a very liberal intervention of government in marketing. How well does this mixed or mixed-up marketing system work?

First we must ask the question: why cannot the free market satisfactorily cope with the situation involving rapid production or technical changes pressing on a slowly growing demand? The free market assumes that factor inputs and outputs can be adjusted fairly quickly — lay off workers, close a plant, meet demands out of inventory. This can't be done in agriculture. Further, the free market because of the small numbers of buyers tends to be shot through with monopolistic factors of various kinds.

Thus long ago farmers turned to self-help measures. They turned to marketing-operatives.

Several basic principles characterize the co-operative movement and these naturally assume importance in consideration of the role of co-operatives in marketing agricultural products. The first of these is the concept of open membership or the idea that no prospective member who agrees to the objectives and operating methods of the co-operative should be barred because of financial status or other reason. A second principle is the one-member one vote idea of control of the co-operative. A third principle is that the rate of interest or return on capital invested in a co-operative by members shall be kept at a definite limit, thus allowing the greatest possible scope for distribution of patronage dividends on the basis of the amount of business done by the individual member with the co-operative. Without representing a cardinal principle of the movement, co-operatives generally observe the principle that they will buy and sell any goods handled at current market prices. Thus the general expansion of the business of the co-operative is achieved not by price competition, but by payment of a patronage dividend to members.

The implications of these principles of co-operation have been summarized very effectively in Chapter 3 of the "Report of the Inquiry of Co-operative Enterprise in Europe, 1937", published by the Government of the United States. It reads as follows:

> "A co-operative enterprise is one which belongs to the people who use its services, the control of which rests equally with all the members, and the gains of which are

distributed to the members in proportion to the use they make of its services."

Emerging clearly from the principles stated before and from the above quotation is the central point that the co-operative movement is voluntary in character — and is often referred to as the voluntary co-operative movement.

Co-operatives are not regarded by the people of Canada simply as a means of doing business. Importance is attached to the self-help aspect of co-operatives and to the fact that they help to democratize control over the economy. In consideration of these and other features of this form of organization, both federal and provincial governments have enacted special legislation on behalf of co-operatives. We regard this as proper.

The ownership and control of a co-operative is in the hands of those who use its services. Decisions are made and control is exercised by the owners as patrons rather than as investors. A person invests his capital in a co-operative not for the financial return he might realize on that capital, but for the gain he will obtain in the way of services as well as by way of patronage dividends. Co-operatives are often referred to as non-profit business enterprises — since business proceeds over and above the costs are credited to the patron-owners, and are so credited primarily on the basis of their business transactions with the co-operative. These are fundamental differences which cannot be ignored when assessing the problems in farmer-controlled marketing and the peculiar place of the co-operative on the marketing scene. Thus it is clear that a marketing co-operative is more than just another processing plant. If it does not also have a social significance in its community and particularly among its members, it has lost a part of its reason for existence as a co-operative.

The beginnings of the co-operative movement in Canada can be traced back to agricultural societies founded as long ago as 1789 in areas now in the provinces of Nova Scotia and Quebec. The volume of agricultural products marketed by co-operatives has been increasing steadily in recent years. In 1961 the value of these commodities passed the billion dollar mark.

There are two types of marketing co-operatives in Canada (1) the federated, in which locals are autonomous; and (2) direct membership where all business operations are carried out by a central administration. The Manitoba Pool Elevators is an example of the federated type and the Saskatchewan Wheat Pool is a direct membership organization. The Canada Department of Agriculture reported that in 1960, 33 per cent of all agricultural products marketed in Canada were marketed co-operatively. By product groups the figures were:

Dairy products	28 per cent
Livestock	32 per cent
Poultry and eggs	16 per cent
Grains	56 per cent
Fruits and vegetables	22 per cent
Maple products	49 per cent
Honey	54 per cent

Marketing Boards

Many agricultural marketing co-operatives were organized not only for the purpose of bringing greater efficiency in handling farm products, but also with the objective of adding price and income stability. These latter efforts, however, were frequently thwarted because much of the product was naturally marketed through private channels. This led co-operatives to appeal to government for the establishment of marketing boards which would allow the control of the entire product. Thus rather than having interests inimical to co-operatives these boards have often allowed co-operatives to accomplish things which they could not otherwise do. This is accomplished by making the co-operative an agent of a board.

The first provincial marketing act was passed in British Columbia in 1927 at the insistance of the apple marketing co-operative, and now all provinces, except Newfoundland, have legislation authorizing provincial producer marketing boards. This legislation authorizes producers of any given product to establish a board to control the marketing of a product. Usually a two-thirds vote favouring the scheme is required.

Producer marketing boards must come under government authority in order to achieve compulsion and to provide a means of protecting the public interest. Governments therefore enact marketing legislation to provide the legal framework under which marketing boards (1) can be established to achieve their objectives; (2) can be the authority for compelling the will of the large majority on the interests of the small minority; (3) can protect the interests of those coming under the marketing plan, as well as those of the general public; and (4) carry out day to day operations. It must be recognized of course, that within such a legal framework which is subject to test in the courts, there is a wide range of flexibility in the way in which marketing board functions can be employed by different boards.

The three principal types of producer marketing board organizations operating in Canada are described as follows:

"Schemes operating in the province can be classified into three basic types. The simplest of these are the committees which negotiate prices and terms of contracts with processors or other buyers. An arbitration board may be appointed to settle any dispute upon which the committee cannot reach agreement.

"The second form or organization may be called negotiation-agency control. This is similar to the first except that the board may establish a marketing agency to sell the product and collect payment under the terms set by the negotiating committee. In addition, these boards may prohibit the marketing of any grade or class of the regulated products, and may require proof of financial responsibility on the part of buyers.

"The third form of board organization is of the central selling agency type. The marketing agency's powers are delegated directly to it by the provincial board. The control that these agencies may exercise over the marketing of their produce is almost as extensive as that of the boards in British Columbia, but the Ontario agencies have just recently begun operation, and are increasing regulation only as conditions appear to warrant it. The agencies have power to direct produce to market, to allocate existing markets among producers, and to set prices and impose service charges." 1)

On Conflicts and Difficulties

The marketing operations of co-operatives and of marketing boards sometimes give rise to possible conflict or misunderstanding between these groups. These are in the following area:

(a) Direction of the Product: It is maintained that a producer board must have direction of all of the product if it is to have significant influence on prices, regardless of the pricing system that may be in effect. Such direction also offers the means of controlling abuses which may exist in producer-buyer relationships, particularly those concerned with the transportation and assembly of the product. On the other hand, it is maintained that a co-operative, being founded by its members to provide them with a marketing service and an assured market for their products, would not be long in business if its members' produce was directed to a private assembly or processing plant. It would then be most difficult to operate as a co-operative.

(b) Producer-Processor Negotiations: In some instances conflicts of interest have arisen when collective bargaining negotiations are undertaken between a producer's organization and a group of processors, when the latter includes a farmer-owned co-operative processing plant. This places the co-operative in the awkward position of seeming to bargain against its members.

(c) Some Results of Negotiated Prices: On occasion, co-operatives, whether or not they take an active role in price negotiations, find that the resultant producer prices, either when set by negotiation or finally by arbitration, are so high in relation to the expected yield and sale price of the product, that the successful operation of their plant is most difficult, if not impossible.

(d) Board Service Fee: Some co-operative members argue that their co-operative has performed all that they expected of it in the past without the existence of a producer board, and that where such a board comes into existence, they see no reason why they should be expected to support it financially. Existing producer boards on the other hand feel that their operations are of benefit to all producers, in helping to stabilize the market, and in injecting needed economies in marketing which are reflected in the prices paid to all producers.

(e) Government Assistance: A general area of possible conflict, involving particularly the private trade might arise where a provincial government makes loans or grants for establishing a co-operatively sponsored or state owned processing plant. While such grants or loans are in some situations quite proper, it is suggested that a government in this position might be tempted to use its influence in a way that would effect the direction of product to such a plant — if only as a means of improving its position as a creditor.

(f) "Compulsory" Co-operatives as Agents of Marketing Boards: It is held that the use of the name "co-operative" in those organizations established by and closely controlled by compulsory marketing boards is a violation of the term and the significance which it has for producers and for the public at large. The question is raised whether there could be any justification for permitting the formation by marketing boards of so-called "co-operatives" as agents of the board, when after their formation, they could scarcely be distinguished from the board itself.

(g) Voluntary Co-operatives as Agents Under Board Policy: A final area of conflict may arise between the marketing board which uses an established voluntary co-operative as its selling agent and the co-operative itself. This would concern policy decisions of the board. It is generally true that co-operative management possesses a greater knowledge and experience in the field of marketing than does a newly established marketing board. Thus decisions may arise where the board will direct the co-operative, as its agent, to undertake certain transactions which the co-operative with its greater experience considers not in the best interests of the producers concerned.

A difficult situation exists when co-operative personnel join private processors in meetings with producers at the bargaining table. The long-time interests of producers would be better served if, prior to such negotiations, there was consultation between the producer negotiators and co-operative management. Co-operative personnel should not be party to negotiating against their own members, even though this may leave them somewhat vulnerable as a result of abdicating their rights to assist in establishing prices and other conditions of purchase and sale. Co-operative influence should be exerted on the producer negotiators prior to the negotiations, upon their own members, and through membership, on any producer marketing board.

The widespread experience which co-operative personnel has had in facing practical marketing problems over a long period of years puts the co-operative in an extremely strong position to act as agents or agencies of a marketing board. Marketing boards should take full advantage of the experience

1) Poetschke and MacKenzie, *The Development of Producer Marketing Boards in Canadian Agriculture,* University of Alberta, Edmonton, 1957, p. 34.

of co-operatives, not only in performing warehousing and processing functions, but also in that experienced co-operative management workers should be consulted at all stages of the operations of a marketing board. One of the greatest shortcomings in handling products through marketing boards is the limited experience which the paid officers of a board may have. In a purely constructive way it is suggested that the management personnel of marketing boards should be widely experienced men recognized as experts in their field. If such men are not employed it is safe to predict trouble for a marketing board.

Government in Marketing

It will be evident from the earlier statements that government has had a positive role both with respect to co-operatives and with respect to marketing boards. Aid to co-operatives has been given through special legislation dealing with the incorporation and taxation of co-operatives. It has been rendered through government research and other services specifically on behalf of co-operatives. It has been rendered through provision of credit to carry the inventories of co-operatives. And not least it has been rendered through direct grants and capital loans to co-operatives. All of these have given to the federal and to the provincial governments a positive role in agricultural marketing. Much the same applies with respect to marketing boards. These boards are authorized, encouraged, and supervised by provincial governments. Governments frequently provide research and other services required for the successful operation of marketing boards.

But there is another way in which governments have a very direct stake in marketing. This is through the operation of government in contrast to government authorized producer marketing boards. The best example is in the Canadian Wheat Board which is a purely governmental operation but one which is carried out for the benefit of farmers. Then too in the 1930's Canada had an experiment with federally authorized producer marketing boards. Over the short period which these existed they did not come to play an important part in agricultural marketing. This was in part due to the fact that they were continually under attack in the courts, and finally in 1937 the federal legislation on which these operations were based was found *ultra vires*.

There is a renewed interest in a federal approach to producer marketing boards. This is due in a large part to the fact that the present very unsatisfactory dairy situation is in a large part the creation of federal agricultural policies and thus it is felt appropriate to ask the government to institute a national marketing plan which would involve fairly stringent controls aimed at bringing the supply of and demand for dairy products into line. There is also considerable discussion in the Prairie Provinces respecting the national hog marketing board. This interest results to considerable extent from the dissatisfaction with pricing and other marketing practices where hogs are shipped directly from farms to packing plants.

With clarification of legislation respecting co-operatives and marketing boards, with a greater awareness that both groups are working legitimately and directly in the interests of primary producers, with improved administration in the agricultural marketing field, with a greater effort on sound public relations, and with increasing recognition of the need to make federal price support and other federal marketing policies consistent with the legitimate objectives of co-operatives and marketing boards, the problems of agricultural marketing may in considerable part be solved. In consideration of the present Canadian situation, co-operatives, marketing boards, and a vigorously competitive private enterprise are required to meet the needs of Canadian farmers.

CLASSIFIEDS

WANTED

SALES AGENTS NEEDED, Part-time or full time, to sell Sunmaster Guaranteed Five Year Light Bulbs to homes, stores, offices, factories. Sales come easy — profits come fast. Up to $10 and more in a single hour. Write for full details to: Sunmaster of Canada Limited, Dept. M. J. 2nd floor, 145 Yonge Street, Toronto, Ontario.

POULTRY

STARTED SPECIALS

Canada's oldest breeder, egg production stock. Hansen's Criss-Cross Leghorns, Red X Leghorns, Minorca X Leghorns, Barred Rocks, Red X Rocks, Pilch's White Rocks, Light Sussex, Red X Sussex and Rhode Island Red pullets. 4 weeks old $50. per 100. 6 weeks old $60. per 100. 4 weeks old capons .40¢ each. 4 weeks old cox .30¢ each. Guaranteed 100% live delivery. $1. down, balance C.O.D. Kent Started Chicks, Chatham, Ontario.

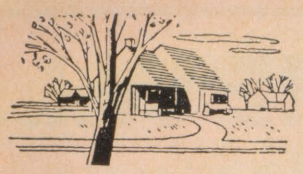
LEGHORN PULLETS

Hansen's First Generation Criss-Cross Leghorn pullets. $36. per 100, day old. $50. per 100, 4 weeks old. Top contest winners in Canada and U.S.A. Pilch's First Generation White Rock capons — 4 weeks old $43. per 100. Several other breeds — day old and started, available. Guaranteed delivery. Write today. Goddard Chick Hatchery, Chatham, Ontario.

PULLETS $14. per 100

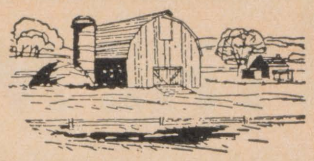
White Rock pullets — Thousands available weekly. Also 8 other breeds, at special prices. Heavy breed cox $4. per 100; Mixed chicks .14¢ each. Heavy breed cox — 4 weeks old $30. per 100. Capons — 4 weeks old $38. per 100. $1.00 down, balance C.O.D. Sexing Depot, Chatham, Ontario.

COMPLETE PRINTING FACILITIES — Labels, tags, tickets, etc. Whatever your printing needs Rod & Gun Press can handle them for you. Take the worry out of this portion of your operation's requirements — ALSO THE HIGH COST. Inquire today on our prices. If it can be printed we can do it. Rod & Gun Press, 481 Beaconsfield Blvd., Beaconsfield, P.Q. 695-5715, Area Code : 514.



The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



Northern Women present challenge

HAVE YOU EVER had to fly to reach the next community, 100 miles away or so? Have you ever had to travel 300 miles by plane to reach a dentist to have a tooth pulled? "These are normal everyday occurrences in the north", says Mrs. William Hough, Stratford, Ontario, as she reports on her recent journey to the Yukon and Mackenzie District in the interest of the Federated Women's Institutes of Canada. Among some of the vivid word pictures she paints: a small boy struggling up a fifteen foot embankment carrying a pail of the muddy Mackenzie River water to his home (how can the Women's Institute stress cleanliness in the home, she comments, when there is no adequate water supply); an Indian family that had taken in an old widow without family and a small orphaned child; Arctic cranberry jam and tarts at a W. I. supper (delicious!); music by Indian boys who have a keen sense of rhthym, and the friendliness of the native women everywhere she went.

Mrs. Hough visited the groups organized in 1960, three of whom she found in a flourishing condition. Inuvik, "the modern story book picture town", the term used by Mrs. Hough, holds craft classes at the Federal School and a Get-Acquainted party is held each fall as the population is quite transient. At Discovery she found their outstanding project had been collecting $1,700 for cancer treatment for one of the residents at the camp. Other welfare work is also done for the needy in the Yellowknife area, 15 minutes away by air. Fort Providence is carrying on an extensive work in crafts, in particular reviving the older Indian handwork. Their moosehair embroidery has become quite famous all through that region and even further afield. A class in Basic English for pre-school native children is another outstanding project of this group. Fort McPherson had temporarily disbanded but there is a possible reforming of the W. I. there among the native women.

Five new Institutes were formed. These are a second group at Inuvik, composed mainly of native women and choosing the name Delta W. I. to avoid confusion with the older W. I. at the other end of the town; Aklavik; Fort Good Hope; Fort Simpson and Fort Smith, the latter to be called "Capnoweta W. I." (Capital of the North West Territories). Contacts were made in several other settlements with interest created which may bring results later.

The Yukon proved more disappointing. The more advanced development there seems to have widened the barrier bewteen the white and native population with the result the latter are more withdrawn, is Mrs. Hough's observation. The response and interest shown by the women in the Yukon could not be compared with the Mackenzie District. As the Yukon was the later place visited results cannot yet be assessed.

"The FWIC is meeting the challenge in promoting and extending the W. I. program to the women of the north", says Mrs. Hough. She goes on to say that the opportunities are boundless and the FWIC should push this work vigorously. "It is imperative we develop a greater extension program and assist our native women to improve their basic homemaking skills as the customs and influence of our way of life continues its advanve into Canada's Norhland", are her concluding words.

Mrs. Hough displays articles of native handwork, brought back from her trip to the Northwest Territories. She is holding slippers done in the now famous moosehair embroidery, turned out by the Indian members of the Fort Providence, W.I. Another example of this traditional work, being revived by the branch, is the floral piece on the wall. (Mrs. Hough gave another to the national office, a beautiful thing). Other types of embroidery are shown on some of the other articles. There are a few made of sealskin and the mukluks have legs and instep tops of loon skin, with feathers intact. The enchanting doll is in regulation Indian dress down to the last exacting detail. The waistcoat was made by an Indian woman with the embroidery wonderfully done in an original design inspired from the picture of one flower she had seen. It is too bad no indication can be given of the colouring in this display.

PENNIES FOR FRIENDSHIP

From ACWW London

"We are all delighted with the generous contribution to the 'Pennies for Friendship' Fund, and greatly encouraged by the substantial increase in the amount over that of last year.

"We are most rateful to your members for their free will donation to the Fund, and for their friendly interest and very real help in the work of ACWW".

This extract was from a letter written to Mrs. Beattie from Mrs. P. S. Fraser, ACWW Financial Secretary, acknowledging the extra donations from Quebec WI's of $264.34.

THE MONTH WITH THE W.I.

Christmas meetings are the major news items this month. Christmas readings, carol singing, gift exchanges and parties for the children have been enjoyed. The less fortunate have not been forgotten, almost every branch report mentions boxes for sick and shut-ins and for needy families. Main donations have been to Homes for Retarded Children, Old People's Homes, UNICEF, CARE, hospitals, the Unitarian Service Committee, and to our own Service Fund.

ABITIBI :

Rouyn Noranda held a successful card party, with door prizes, refreshments and a drawing on a bedspread.

ARGENTEUIL :

Brownsburg entertained members of Upper Lachute-East End. Donations were made to a school for retarded children, and gifts sent to retarded children not attending school. **Dalesville-Louisa** collected Pennies for Friendship, and also helped the school for retarded children. **Frontier** sang Christmas carols and **Jerusalem-Bethany** members attended a course in sewing and glove making. **Lachute** held their meeting at the home of Mrs. Gordon Davidson, who has made an intensive study of antiques. Beautiful examples of old furniture and glass were on display, and questions were answered by Mrs. Davidson. **Lakefield** and **Pioneer** sang carols and exchanged gifts, and several members of the latter branch attended the sewing classes given by Mrs. Wells and glove-making classes conducted by Miss Runnells. **Upper Lachute-East End** also enjoyed the sewing and leatherwork classes, and instead of an exchange of gifts they took up a collection for retarded children.

BONAVENTURE :

Black Cape members have adopted a foster child in the Philippines, and each member brought in a birthday gift to be sent to him (or her). **Marcil** and **Port Daniel** entertained teachers and school board members. The guest speaker was the Physical Education Instructor, who, with the aid of students, gave a demonstration of exercises done at school. **Matapedia** presented silver baby cups to several members with new babies.

BROME :

Abercorn are busy quilting the fan quilt, with which they won 1st prize at the County convention. **Austin** report that their bursaries were won by Penny Lee and Madine Dufresne. A baked bean and salad dinner was held. **Knowlton's Landing** had a sale of left-over articles and a Christmas party for the children. **Sutton** had a talk on antiques and their history given by Mrs. Cecil Carr. Each member brought in some talent money. **South Bolton** held an Old and New Sale and card parties.

CHATEAUGUAY-HUNTINGDON :

Aubrey-Riverfield had an all day quilting, and completed two quilts for the Welcome Hall Mission. Toys and dolls were donated to a children's home. **Dundee** are proud to report a new member. A Christmas decoration contest was held. **Franklin Centre** are interested in a fence around the school yard, and the school board is to be approached about this. **Hemmingford** gave prizes for handmade Christmas cards. Mrs. L'Esperance, convener of Agriculture, spoke at the Opening Exercises at the high school. To each of the girls who helped to make the School Fair a success, she presented a "Chinese Garden". The convener of Education presented the W.I. shield to the student in Grade 8 or 9 who got the highest marks.

COMPTON :

Cookshire heard a report of the work done by the Junior Red Cross at the high school given by Miss Emily Hamilton. Mrs. Hodge spoke on the unfounded claims about heart disease and fats, which injure the sale of dairy products. A report on the Maplemount Home for children was given by Mrs. Heatherington, and Miss K. Learned read an article entitled "Parents should assume more responsibility in the bringing up of their children." **East Angus** had a paper drive, and they report that Mrs. Wells Coates had the honour to be named a director of the "Quebec Farmers Association". **East Clifton** held a penny auction, and heard an account of the Royal Winter Fair. **Sawyerville** heard a paper written by a Grade IX pupil on "The Conservation of Soil and Forest". The roll call was answered with a toy suitable for a retarded child. **Scotstown** enjoyed color slides of local scenes and a trip to P.E.I. They sent gifts to the Wales Home.

GATINEAU :

Aylmer East celebrated their 37th anniversary, and were happy to have two charter members, Mrs. W. Radmore and Mrs. W. Allen, present at the meeting. Mr. C. A. MacTavish, principal of the high school addressed the meeting on the consolidation of schools in the district. **Eardley** heard an account of a trip to B.C. given by Mrs. Frank Cornu, and a contest of words starting with "Can" was conducted by Mrs. S. Beattie, and won by Mrs. S. Robinson. **Rupert's** guest speaker was Col. Waugh, Director of Finance and Services for Penitentiaries. Tulip bulbs were planted in the Union Cemetery, which is looked after by this branch. **Wakefield** heard an interesting talk given by Mrs. E. Dunn on "Interior Decorating". **Wright** sent jams and jellies to the Memorial hospital.

It is reported that the nine branches in this county served tea and cookies at the Winter Fair. Proceeds went to County funds.

JACQUES CARTIER :

St. Anne de Bellevue report that food vouchers were given by local stores in response to appeals for the needy.

MEGANTIC :

Inverness answered the roll call by naming some way in which we have spoiled Christmas. A paper was read on working conditions in the North, also on the new W.I. branches. **Kinnear's Mills** held a card party and a drawing on a doll.

MISSISQUOI :

Cowansville heard a talk by their Welfare and Health convener on the dangers of handling and using some prepared foods. Over 200 articles were collected to be sent to the Cecil Memorial Home. **Dunham** bought gifts for a child in hospital, and **Fordyce** made plans to remember shut-ins. **Stanbridge East** exchanged favourite Christmas recipes. They have placed a decorated Christmas tree on a lot they own.

PAPINEAU :

Lochaber enjoyed a millinery course conducted by Miss McOuat. A sale of home-made articles was held, and it was decided to give the proceeds to the Lions Club for their Christmas baskets.

PONTIAC :

Beech Grove's roll call was "Tell an embarassing but humorous incident that happened to you". **Elmside** are collecting used clothing for UNICEF, and are making sweaters, stockings, layettes and slippers. **Fort Coulonge** held a "Wear an Apron" display, with prizes going to Mrs. A. Fumerton and Mrs. M. Duke. Guest speaker was Mrs. David Dickson, Co-Editor of the Equity, who explained the various processes involved in transforming the written word into the printed word. **Shawville's** contest was to spell Khrushchev — those failing the test were fined 10¢. (Only one member passed) A discussion was held on whether to exchange Christmas gifts, or whether to spend the money on needy families. **Starks Corners** welcomed a new member — Mrs. Moffatt. Cross stitch aprons were displayed.

RICHMOND :

Denison Mills are collecting Salada tokens, and giving the proceeds to Pennies for Friendship. School prizes donated by this branch were won by Sandra Lockwood for Home Economics, and Edwin Baker for Industrial Arts. **Gore** sent gifts to the Cecil Memorial Home. **Melbourne Ridge** answered the roll call with gifts for shut-ins. Their W.I. Hall has been painted, and new blinds and curtains are to be purchased. **Richmond Hill** had a Variety Sale with the proceeds going to a retarded children's home. **Richmond Young Women** had a quiz on Streets in Montreal, conducted by the Citizenship convener, Mrs. M. Fowler. Mrs. A. Smith was the winner. **Shipton** held a contest for Homemade Christmas Decorations, and prizes were won by Mrs. W. Broscomb and Mrs. J. Saffin. **Spooner Pond's** roll call was "A Penny for each letter of your first name" with the Pennies going to "Pennies for Friendship".

A quiz on Food Values was won by Mrs. Blanchard, and a gift was presented to Mr. and Mrs. Roy Harrison on the occasion of their Golden Wedding Anniversary. A donation was given for hot lunches for needy children at St. Francis High School.

ROUVILLE :

Abbotsford brought in gifts for retarded children, and sent a shower of birthday cards of a shut-in member.

SHERBROOKE :

Ascot greatly enjoyed a talk on Wills and the settling of Estates given by Miss Roberts of the Sherbrooke Trust Company. Flannelette blankets were donated to the Maplemount Home. **Belvidere's** donation to the Home was a patchwork quilt. A paper drive was held. **Brompton Road** held a family night and a card party. A demonstration on making Christmas decorations was given by Mrs. N. Hatch and Mrs. E. Goodfellow. **Lennoxville** held a kitchen linen shower for the Maplemount Home. 12 hours work was put in at the Cancer Dressing Station, and members assisted at the VON Thrift Sale and at the Rotary Free Footwear Day. **Milby** report a food sale, a paper drive and a citizenship contest.

FROM THE OFFICE

The Junior Red Cross still want your used stamps. They get 75¢ a pound and use the money for their good work for underprivileged children. Address: Red Cross Bldg., 2170 Dorchester Blvd. W., Montreal.

* * *

The Montreal Council of Women suggest that we write individually to the CBC if we would like the church broadcasts back on the air. Address: Mr. Marcel Ouimet, P.O. Box 806, Ottawa.

* * *

Annual Report forms have been mailed to all branch secretaries, and county forms to county secretaries and treasurers.

* * *

Semi-Annual dates are February 8, 9, 1963. YMCA, Montreal.

* * *

And thank you one and all for the lovely Christmas cards and good wishes.

THE XMAS STOCKINGS

Mrs. D. Lewis of the Canadian Save the Children Fund reports that 728 stockings were sent from the QWI. They were amazed and delighted with the response and here is an extract from a letter from Greece which they had received:

A young girl had been trained to operate a nursery school in her village. In three years it was well started and then a mountain flood swept everything away. She was heartbroken. The children had lost all of their few possessions. The Canadian Save the Children field worker 'placed a bright red Christmas stocking in the girl's hands saying, "These have just arrived from Canada." The girl held it a moment and then handed it slowly back. "I could never decide who was to get it," she said. "But there is one for each child," she was told. The girl turned away and wept. A week later with enough clothing to keep the children warm, food to help them face the winter and "Christmas from Canada" to fill their hearts, she started back up the mountain to her village.'

STERILIZERS DONATED

Two sterilizers were presented to the Pontiac Community Hospital by the Pontiac County Women's Institutes Monday afternoon in the Board room. Representing the Institutes were President Mrs. Art Turner, Vice-President Mrs. Fred Fraser who is also a member of the Hospital Board, and Secretary Mrs. Roland Graham. Accepting on behalf of the Hospital, was Mrs. Dorothy MacDougall, Supervisor.

Mrs. MacDougall told the ladies present that the new sterilizers would be used, one on each floor, to hold daily syringes. This will eliminate the necessity of wrapping extra syringes as is now the practice and will cut down considerably on the work involved. She expressed the thanks of the entire staff to the Women's Institute and said the Hospital depends a great deal on the good works of such organizations.

The sterilizers were appropriately engraved and will be a permanent record of the Institute's interest in the Hospital.

1963

LAMB

NATURALFLOW

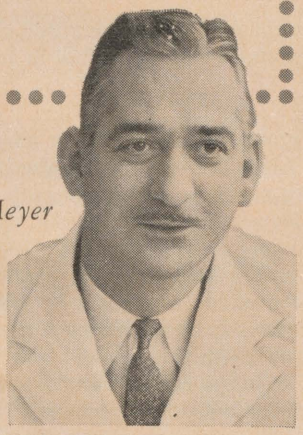
MAPLE SAP, PLASTIC TUBE GATHERING SYSTEM

For information write

A. C. LAMB & SONS

LIVERPOOL, N. Y.

A Chick's "Urge to Grow"



Wally Meyer

SHUR-GAIN PUTS THE GAIN IN POULTRY FEEDS

Every day-old chick holds inside it a great "urge to grow". The poultryman who makes the most of this built-in bonus, is the man who profits most from his birds.

There are many factors which influence the health and vitality of a baby chick. Hereditary factors such as breed strain plus breeding flock diet, flock health, etc. There are also environmental factors such as heat, ventilation, disease-free surroundings and proper feeding and watering equipment.

These factors must be considered in the light of profit dollars. However, the best way to ensure that your chicks will develop to their full potential at lowest cost is good management. It is the toughest factor to handle well.

Take the choice of feeds for example — one of the major costs in raising chicks. You must be sure you have the feed that provides all the essentials vital to rapid chick development, yet leaves profit dollars where they are needed.

High efficiency Shur-Gain Chick Feeds include a complete range of chick starters and growing feeds all tested and proven under close supervision at our demonstration farm at Maple, Ontario.

The Chick Starter manufactured by your local Shur-Gain Mill offers all the advantages — including excellent palatability, so important in keeping chicks on feed; complete freshness, giving full benefit from optimum levels of available vitamins; and the option of the most effective medications, to overcome stress conditions or for the prevention of coccidiosis.

And, of course, Shur-Gain Chick Starter develops future layers at the lowest possible cost, and yet capable of producing at their maximum—available now from your Shur-Gain Feed Service Mill in mash or crumbles.

SHUR-GAIN
POULTRY FEEDS

SHUR-GAIN FEED SERVICE MILLS
your balanced feeding headquarters
IN CONTRACT WITH CANADA PACKERS

CERTIFICATE OF MERIT

The Federated Women's Institute of Canada have been awarded a Certificate of Merit, by the Canadian Historical Association, for their "outstanding contribution to local history in Canada". The work of the Women's Institutes in preserving local history, through the Tweedsmuir Village Histories, merited a similar award in 1949 from the American Association of Local and State History.

This is a continuing project and over 2,000 histories have been completed so far.

SELL — BUY or SWAP

Now, a convenient way to sell or swap unused equipment, furnishings, goods, services, etc., or to locate something you require —

A MACDONALD FARM JOURNAL CLASSIFIED ADVERTISEMENT WILL BRING RESULTS !

For small cost — just 20 cents per word — you can reach the desired results to sell, buy or trade. Your ad will be read by English speaking farmers in the Province of Quebec among many others. Write out your ad, count the words, send cheque or money order of required amount and mail to :

Macdonald Farm Journal, 481 Beaconsfield Blvd., Beaconsfield, P.Q.

ADAPTATION TOWARDS EVOLUTION !

February 8-17
1963

THE SALON OF CHAMPIONS !

- Super market of Farm Machinery
- Practical clinics on silage and equipment
- Veterinary clinics
- For the first time in Quebec, official presentation of the Charolaise (multipurpose cow imported from France)

BEFORE BUYING COME IN AND COMPARE
NEW MUNICIPAL PARKING LOT
20¢ first hour — 15¢ each additional hour

THE CHAMPION OF ITS CLASS

SHOW MART 1650 Berri Street Montreal

For Your Information

In Step With Progress

For its 11th annual event the National Salon of Agriculture, biggest winter fair in Eastern Canada, will have a new look and many new features. The show will begin Friday, Feb. 8 and will last until Feb. 17 at the Show Mart, Montreal.

For livestock people around 50 beef steers, fattened by young farmers from distant points throughout the Province, will be judged and later sold at the auction in the main foyer. With the co-operation of the staff of the Veterinary School at St. Hyacinthe, various operations of interest to farmers will be performed during the Salon.

As usual farm machinery clinics will be held daily, with prominent district agronomes taking part. Among the topics to be discussed will be forage crop production, machinery upkeep, and cash crop harvesting.

Of all people concerned with the effect of the atomic age the farmer seems to have been forgotten. This year at the Salon, Quebec's Civil Protection Service will be demonstrating the decontamination of food, and particularly the protection and decontamination of farm animals, in the case of nuclear attack.

During the week of the Salon several national and provincial farm organizations will be holding their annual meetings, and altogether "Farm Week" will bring to Montreal a host of interested agriculturists.

Advertising Budget of Five Millions for Promotion of Dairy Yield

Advertising and promotion are words we can't escape today. In many cases farmers have been accused of forgetting the importance of advertising. Such is not the case of the dairy farmers of Canada. They began, in 1950, a most ambitious advertising program. Every June, one per cent of the producers return was set aside to pay for this service. Today, because of the high costs of advertising, it is felt that to think in terms of thousands of dollars is not good enough. It has to be million dollar conversation.

The Dairy Farmers of Canada are thus proposing an expanded June-set-aside program. Under the proposed plan, dairy farmers will be asked to set aside one percent of the total farm value of all sales of milk and cream the year round. This is expected to yield a total advertising budget of five million dollars a year. With this amount, dairy farmers can once again meet their competitors for a place in the sun in the world of advertising.

New Zealand Begins Freeze-Drying

A New Zealand firm has started to market freeze-dehydrated meats and vegetables in New Zealand. Currently being sold are dehydrated raw hamburger, raw sausages, cooked beef stew, and cooked roast lamb. The chief advantages of these meats are their storability, light weight, and ease of preparation for the table.

Work on freeze-drying techniques has been done in the U.S. and Canada, but almost entirely on an experimental basis.

Farm Forum News 'N' Views

On Farmer-Hunter Relations . . .

Quebec Farm Forum members agree unanimously that young hunters should be trained in the art of handling firearms and in the sport of hunting. As the Harrington Forum in Argenteuil County reported, "young hunters should be trained before they receive their first license. They should be given a gun and have to demonstrate that they know how to take it apart, how to assemble it, and how to use it for target and sport. Exams should be written as for car licenses."

The Mansonville Forum in Brome County added that education in the conservation of wildlife should be included in any hunter training program.

Who should be responsible for the training of young hunters and who should pay the cost? Several groups felt that it was the government's responsibility and that they should pay for any hunter training program. The East Settlement Forum in Argenteuil County thought that hunters should be trained under the supervision of the Quebec Department of Fish and Game in co-operation with the Quebec Federation of Fish and Game clubs. The training would be paid for with a portion of the hunting license fee.

A question concerning the "clubbing" of property brought little response from the Forums. Only one group had any concrete proposal about distribution of financial returns as a result of property "clubbing". The Brill Forum in Brome County suggested that in case a club did make money that it should be divided among the landowners. They added that some of the money could be set aside in a fund to pay farmers reporting damage to their property by hunters.

What changes do you suggest in the present Fish and Game Act for the Province of Quebec?

This question brought a variety of replies. Brill Forum in Brome County felt that hunters should not be able to rent guns for a day — they feel they must use the bullets before they return the gun and they'll shoot at anything.

Ives Hill and Drapers Corner Forum in Compton County wants an insurance fund to compensate farmers who lose livestock during the hunting season. Many forums agreed with Stanbridge East in Missisquoi County who thought that if the deer season were about two weeks later than it is now, from the last week of November to the first week of December, then a lot of the hazard to livestock out in pastures would be eliminated. The livestock would be in the barn by then.

WEATHER WISE

Snowfall is related to temperature, and occurs most often around 5° Fahrenheit. This has been measured in a number of places. At colder temperatures the snowfall is low. In the Canadian Arctic, for example, snowfall may be only a few inches per winter.

In this part of Quebec the very heavy snowfalls usually occur at even higher temperatures. This snow results when warm, moist air from the south moves north and meets cold, polar air. Since cold air holds less moisture than warm air, snow results when the moist air is cooled. While this snow is falling, we are under the influence of the warmer air.

A possible advantage is that shovelling snow may be more pleasant in mild weather. Also, these heavy snows cause most of the power failures.

OUTSIDE . . .

A bit of June in January

Wondering what varieties of strawberries are recommended for 1963. The Department of Horticulture at Macdonald College suggests four:

1) Cavalier — earliest of the four varieties. Total yield has been equal to or higher than that of Premier and Senator Dunlap varieties. The berries are of good size during the early part of the harvest season but some growers have claimed that the size drops off too rapidly. This variety is somewhat susceptible to leaf spot and mildew.

2) Redcoat — mid — season. Yields have been significantly greater than Senator Dunlap and equal or superior to Premier. The berries are of good commercial size throughout the harvest season. This characteristic along with outstanding appearance and high yield indicate that this variety could prove the most outstanding of the four.

3) Sparkle — A little later than Cavalier and Redcoat. The old standard variety for Eastern Canada.

4) Guardsman — latest of the four varieties. This variety has yielded better than Premier and Senator Dunlap. In certain areas, it is resistant to leaf spot and mildew.

Guardsman turns red before ripe and if not carefully picked may be high in acidity. Certain growers have criticized its high acidity but its dessert quality is acceptable if harvested when ripe.

LETTERS . . .

SCIENTISTS — WHO NEEDS THEM ?

In the index of your November issue, the comments concerning livestock judging are described as "controversial and outstanding." Controversial, yes, but outstanding only in showing the narrow-minded approach of the impractical scientist to long standing farm tradition.

Livestock shows and livestock judging have certain weaknesses — everyone is aware of the problem. However, tape measures and production records can also be "cooked" — especially if breeders are as dishonest, as Dr. Macdonald would have us believe.

Ask any commercial cattle dealer whether he has to judge animals or not. He knows the importance of developing judging talent. Ask what he thinks of production records on grade dairy cattle. These are wonderful measures, but they do not exist.

Do the anecdotes about the falling horn and falling tail at the Royal indicate that these appendages are necessary for good production ? We presume the tape readings in Miss Universe contests indicate productive talent.

A study of dairy breed publications would probably impress Dr. Macdonald. He would find that showring ratings usually represent less than half of the advertisements published by different breeders. However, breeders understand the secondary, but important, role of type in appraising cattle.

The interview on the Animal Science Department confirms the fear of potential employers that the number of Macdonald graduates without any practical knowledge will increase. This will increase the need for Government money to be spent on research work which is useful only in filling scientific publications. It is indeed distressing to see Macdonald College professors going the way of Government research services and losing complete contact with the farm community. Give Dr. Macdonald two years with his charts and tape measures at the Macdonald Royal and the College's divorce from the farm community will be complete.

Mac Grad

WHAT'S NEW ON RADIO

On Sunday afternoon, January 6th, 1963, The Nature of Things, a popular CBC television program returned to the airwaves. It was gratifying to see that somewhere someone had decided that this program should return for another series. Its the type of program that can be strongly recommended to rural viewers since it covers so many phases of agricultural science. The current series features programs entitled The Chemistry of Salt on Feb. 3rd, Science Museums on March 10th, and Tornados on March 24th. These are only three of the many topics that the Nature of Things will explore each Sunday afternoon at 5:30 on CBC-TV.

FARM FORUM TOPICS

January 21 .... Organized Action by Farmers
January 29 ..... A World of Opportunity
February 4 .... Canada's World Obligations
February 11 ..... ARDA and the Community
February 18 ..... Prospects for Farmers in Canada's Economy

On CBC-Radio Network
Mondays at 9:00 p.m.

WHAT'S NEW IN FILMS?

"MY FINANCIAL CAREER"

Do bankers' eyes stare right through you ? Do you blush when you tap your account ? If so, it's time you saw "My Financial Career", a prescription for banking jitters, written by Stephen Leacock and dispensed as a comic cartoon by the National Film Board.

Most of Leacock's humour dealt with ordinary mortals in extraordinary situations and this tale is no exception. It is a yarn about a young man who is prospering and decides it is high time he opened a bank account. However, nothing he has intended comes out quite the right way. In this animated film you savour to the full the dry wit of a Canadian who made kindly fun of the commonplace pretensions of life.

16mm. Colour 7 minutes

May be borrowed from the Extension Film Library, Macdonald College, by any responsible group or individual. Rental 75¢ — transportation charges extra.

Troubles with seedlings

The reason why seeds fail to sprout or, having germinated, fail to produce healthy, young plants is of interest at this time of the year when gardeners who raise early vegetables may have already started some of their seedlings. Unsuccessful sowings are, unfortunately, only too common, and for several reasons.

Mr. E. Lavallée of the Quebec Department of Agriculture and Colonization asks us to remember that a seed is a tiny, dormant plant. It consists of an embryo or germ together with its reserves of food, enclosed in a protective coat. Germination is the growth of the embryo to form a new plant. Seeds are thus living things, very delicate and very vulnerable to conditions even slightly unfavourable to their development.

When seeds germinate poorly or not at all, the grower should begin by asking himself whether the seed was good; because seeds which are too old or did not ripen properly, or have been damaged in threshing, or spoilt by disease or insects, are likely to have only poor powers of germination. With such seed, one is doomed to failure from the beginning.

But even when healthy seed with strong powers of germination is used, there remain powerful causes of failures, such as damping-off, collar-rot and root-rot. These seedling diseases are caused by microscopic soil fungi of the mould type, for example; Pythium, Rhizoctonia, Fusarium, Sclerotinia and others. The destructiveness of these moulds depends on several factors: the nature of the soil, temperature, humidity and light (to mention only the more important). Compost which is too rich in organic matter, such as manure or peat, favours seedling diseases. Although peat and well-rotted manure are valuable ingredients of good compost, they should not exceed 25% of it. Vermiculite or Terra-lite has many of the properties of peat or organic soil without its defects and many gardeners use it with success.

Sunlight plays an important part in the life of the plant; it is necessary for the formation of the green colouring matter in the leaves. In dull weather, plants tend to turn yellowish, lanky and feeble, and susceptible to rot. It is therefore important to allow as much light as possible to enter greenhouses and frames, by locating and orienting them favourably and keeping the panes of glass clean, especially in dull weather.

Excessive and prolonged humidity, both of the soil and of the air surrounding the plants should be guarded against, particularly at night or during dark days. For this reason, the grower should avoid leaving dense clumps of seedlings. One way to accomplish this is by sowing the seeds in rows rather than broadcast. If the soil is cold at the time of sowing, the first watering should be delayed for two or three days. Watering should be done only when necessary, and in the morning rather than late in the afternoon or in the evening. One good watering is better than frequent sprinklings. The greenhouse or frames should be given as much ventilation as possible, so as to remove damp, moisture-laden air from around the young plants: the stronger the sun, the more ventilation should be allowed. When the air around the plants in a greenhouse cools quickly, moisture condenses. In order to get rid of this moisture, the heating should be increased and some ventilation allowed.

All these precautions may not be enough to prevent damping-off, especially in the case of early sowings in February and March. Certain other sanitary measures may also be advisable or necessary, for instance: seed treatments, disinfection of seed-beds, special sprayings or waterings with fungicides when the seedlings emerge and again later.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture and Colonization.

Appointment of Mr. Real Martineau

Technical adviser to the Agricultural Research Council of the Province of Quebec

Mr. Réal Martineau, agronome, and research officer at L'Assomption Experimental Farm has just been appointed technical adviser to the Quebec Department of Agriculture and Colonization, where he will act as secretary to the Agricultural Research Council.

Mr. Martineau pursued his classical studies at the "Collège de St-Laurent" in Montreal, obtaining his bachelor's degree in arts in 1944. He subsequently enrolled in the Faculty of Agriculture of Laval University, at Ste-Anne-de-la-Pocatière, from which he was graduated in 1950 with the degree of Bachelor of Agricultural Science. He later engaged in post-graduate studies of forage crops at Macdonald College and was awarded the degree of Master of Science by McGill University in 1953. In 1952 he was engaged by the Department of Agriculture of Canada and, after having spent a year at the Central Experimental Farm at Ottawa, was appointed supervisor of Illustration Stations for the L'Assomption district. In 1958 he returned to the Central Experimental Farm to undertake research in forage crops, in the capacity of research officer.

REAL MARTINEAU

The new secretary of the Agricultural Research Council is a member of the Corporation of Agronomes of the Province of Quebec and of the Agricultural Institute of Canada, and also of a number of the committees of the Quebec Seed Board, including the Corn and Root Crops Committee of which he is chairman. Results of his experiments and research have been published in the reports of L'Assomption Experimental Farm, and in "Agriculture" (The scientific review of the Corporation of Agronomes), and in farm magazines and newspapers. Mr. Martineau is well known in agricultural circles in the Montreal district as a result of his research in connection with fertilizers, varieties of crop plants, etc.

The foregoing information is released to the press by the Hon. Alcide Courcy, Minister of Agriculture and Colonization.

BOMB-BURSTS AND CHECKERBOARDS !

IT WAS summer, 1918, in France.

The German Army was making its big push on Paris. The U.S. Third Division was in its path. The Germans shelled them unmercifully; the Germans wanted Paris.

The U.S. Doughboys in the front trenches were cut off fom their supply depots, fighting desperately. After three days and three nights of continuous hell, a weary doughboy heard someone cautiously coming up behind him. "Who's there!" he demanded; shouting over the pounding of the big German guns.

"William Danforth," the answer came back through the arid smoke the drifting stench of gunpowder. "Here's a cup of hot chocolate and some cigarettes from the folks back home."

The young soldier smiled, in spite of the anxiety of the time and place — the folks back home were worth it all !

When the U.S. had joined in the Great War, William H. Danforth was 47 years old . . . too old to be called into service. Also, Will Danforth was a busy man. The Ralston Purina Company was then almost 22 years old and had developed into a growing national business with five branches. Leading and guiding this expanding company was a big job. Then, a bigger one called.

General Pershing asked the Y.M.C.A. for canteens and recreation centers for the 2 million U.S. soldiers who were being shipped to Europe. Will Danforth was one of the men who was asked to help. Will was asked to establish, erect, staff and manage some 45 canteens spread across France. Will saw that it was a job that had to be done, and so he went to the war.

Why did he go? Perhaps this little episode can help explain this great man:

Actor E. H. Southern was one of the "stars" of the day and the "Y" sent him to tour the U.S. Troups — to find out what kind of entertainment could be sent to France. He had an amazing trip but his chauffeur supplied one of his greatest surprises.

One day Mr. Southern said, "You seem to be a remarkable chauffeur, where do you come from?"

"From St. Louis," the chauffeur answered.

"What's your name?" the actor asked, "And what do you do there?"

"Danforth is my name," the chauffeur answered, "I am president of the Ralston Purina Company."

The actor didn't know that Mr. Danforth was in charge of the "Y's" activities in this whole area and so he asked, "That's a pretty big concern, isn't it? Can't they find a bigger job than chauffeuring for you?"

Will Danforth answered humbly, "The job that has to be done is always the biggest job anywhere."

Next time you pass the Red and White Checkerboard of a Purina Dealer remember that his is a noble tradition. If you have a problem with management, sanitation or feeding, drop in and talk it over with him. Your problem is important to him. No matter whether it's big or small he's interested. He lives by the motto: "The job that has to be done is the biggest job anywhere !" It's a Purina way of life that's been handed down from the bomb-Bursts of 1918 !

Watch for Chapter 8, entitled "That's how Purina "Chows" were born !"

Canadians who want bigger profits tomorrow feed Purina Chows today.

RALSTON PURINA COMPANY, LIMITED
WOODSTOCK TORONTO WHITBY MONTREAL SAINT JOHN